SHOWN ON THIS PANEL IS LOCATED
? 44 NORTH, RANGE 1 EAST
4 NORTH, RANGE 2 EAST.

MAP SCALE 1" = 1000'

00 0 1000 2000 FEET

NFIP

PANEL 0180D

FIRM

FLOOD INSURANCE RATE MAP

FRANKLIN COUNTY, MISSOURI

AND INCORPORATED AREAS

PANEL 180 OF 650

(SEE LOCATOR DIAGRAM OR MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
FRANKLIN COUNTY	290493	0180	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
29071C0180D

EFFECTIVE DATE
OCTOBER 18, 2011

Federal Emergency Management Agency

NATIONAL FLOOD INSURANCE PROGRAM

Missouri River

Missouri River

Franklin County
Unincorporated Areas
290493

ZONE AE

ZONE AE

ZONE AE
(EL 483)

LABADIE BOTTOM RD

PROFILE BASE LINE

M 57

M 58

Labadie Creek

R.1 E.
R.2 E.

7
8
9
17
18
24

482
483
484
485

F

$^{687\,000m}$E

JOINS PANEL 0190

$^{689\,000m}$E

$^{690\,000m}$E

90° 48' 45

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED
WITHIN TOWNSHIP 45 NORTH, RANGE 2 EAST
AND TOWNSHIP 44 NORTH, RANGE 2 EAST.

MAP SCALE 1" = 1000'

0 1000 2000 FEET

NFIP

PANEL 0185D

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

FRANKLIN COUNTY, MISSOURI

AND INCORPORATED AREAS

PANEL 185 OF 650

(SEE LOCATOR DIAGRAM OR MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
FRANKLIN COUNTY	290493	0185	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
29071C0185D
EFFECTIVE DATE
OCTOBER 18, 2011

Federal Emergency Management Agency

ZONE AE

Fiddle Creek

Little Tavern Creek

ST ALBANS RD

RAILROAD

LIMIT OF DETAILED ST

JOINS PANEL 0195

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

90° 52' 30"

38° 33' 45"

715000 FT

720000 FT

JOINS PANEL 0180

990000 FT

985000 FT

FLOOD HAZARD INFORMATION IS NOT SHOWN ON THIS MAP IN AREAS OUTSIDE OF FRANKLIN COUNTY

M 59

PROFILE BASE LINE

Missouri River

485

R1E R2E

18

24

23

26

19

Labadie Creek

PROFILE BASE LINE

RAILROAD

ZONE AE (EL 484)

LABADIE BOTTOM RD

ZONE AE

ZONE AE (EL 484)

ZONE AE

BOLES RD

RAILROAD

RAILROAD

RAILROAD

PRIVATE DR

483

486

A

B

C

D

E

G

MAP SCALE 1" = 1000'

0 1000 2000 FEET

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0190D

FIRM

FLOOD INSURANCE RATE MAP

FRANKLIN COUNTY, MISSOURI

AND INCORPORATED AREAS

PANEL 190 OF 650

(SEE LOCATOR DIAGRAM OR MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

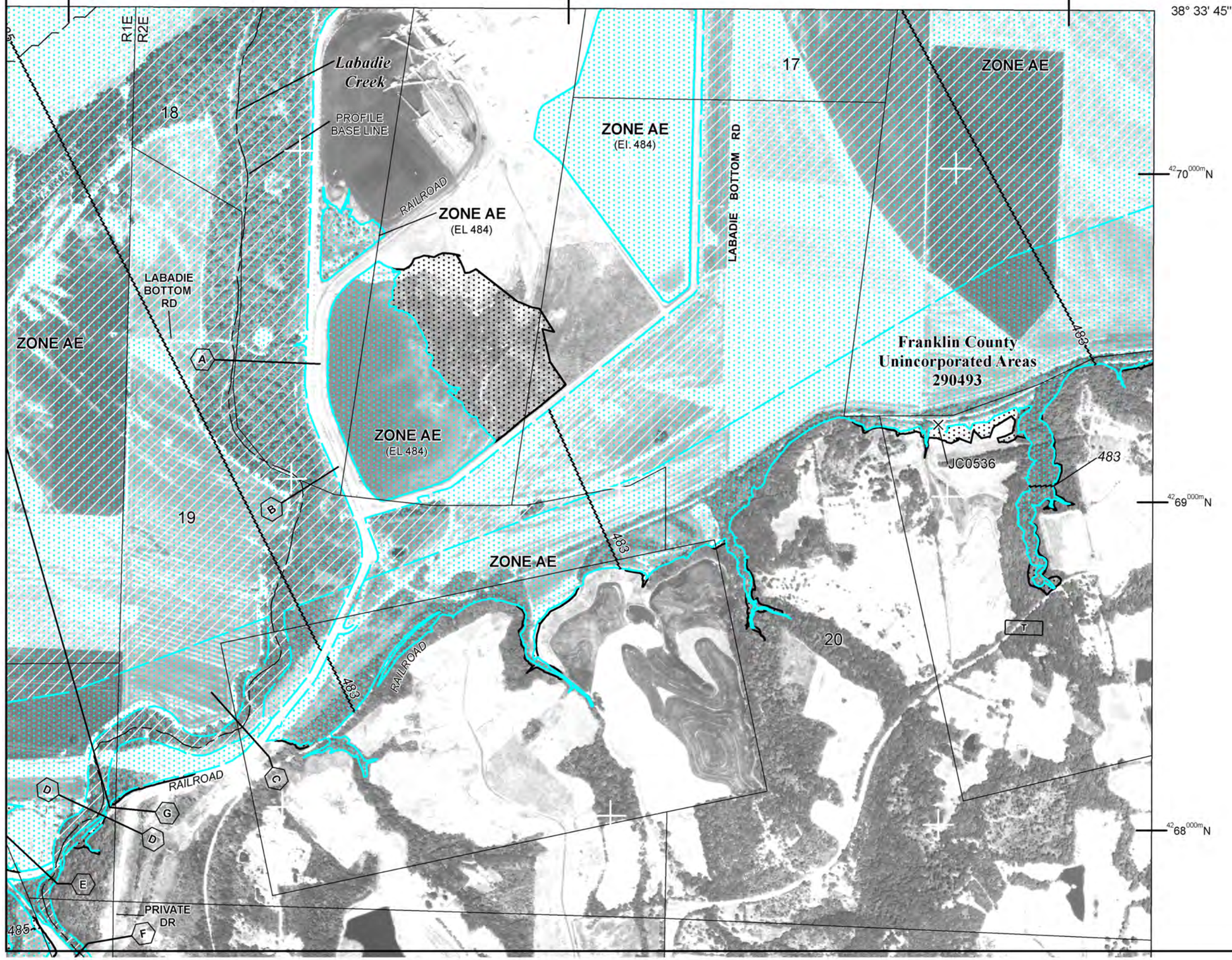
COMMUNITY	NUMBER	PANEL	SUFFIX
FRANKLIN COUNTY	290493	0190	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
29071C0190D

EFFECTIVE DATE
OCTOBER 18, 2011

Federal Emergency Management Agency



MAP SCALE 1" = 1000'

00 0 1000 2000 FEET

NFIP

PANEL 0190D

FIRM

FLOOD INSURANCE RATE MAP

FRANKLIN COUNTY, MISSOURI

AND INCORPORATED AREAS

PANEL 190 OF 650

(SEE LOCATOR DIAGRAM OR MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
FRANKLIN COUNTY	290493	0190	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
29071C0190D

EFFECTIVE DATE
OCTOBER 18, 2011

Federal Emergency Management Agency

NATIONAL FLOOD INSURANCE PROGRAM

90° 48' 45"

38° 33' 45"

735000 FT

JOINS PANEL 0185

990000 FT

985000 FT

FLOOD EFFECTS FROM MISSOURI RIVER

ZONE AE

ZONE AE
(EL 482)

PROFILE BASE LINE

Fiddle Creek

482

483

484

485

486

487

488

489

490

491

493

494

495

496

497

498

JC0535

LABADIE BOTTOM RD

RAILROAD

Iman Branch

DAVIS RD

PRIVATE RD

FIDDLE CREEK RD

LIMIT OF STUDY

GRAND ARMY RD

ZONE A

15

16

20

21

22

T

A

B

C

D

E

F

G

H

I

J

MAP SCALE 1" = 1000'

0 1000 2000 FEET

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0195D

FIRM

FLOOD INSURANCE RATE MAP

FRANKLIN COUNTY, MISSOURI

AND INCORPORATED AREAS

PANEL 195 OF 650

(SEE LOCATOR DIAGRAM OR MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
FRANKLIN COUNTY	290493	0195	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
29071C0195D

EFFECTIVE DATE
OCTOBER 18, 2011

Federal Emergency Management Agency

APPENDIX D

Floodplain Development Permit

FLOODPLAIN DEVELOPMENT PERMIT/APPLICATION

Application No. _____ Date: _____

TO THE ADMINISTRATOR: The undersigned hereby makes application for a permit to develop in a floodplain. The work to be performed, including flood protection works, is as described below and in attachments hereto. The undersigned agrees that all such work shall be in accordance with the requirements of the Floodplain Management Ordinance and with all other applicable county/city ordinances, federal programs, and the laws and regulations of the State of Missouri.

Ameren Missouri		Not Determined	
Owner or Agent	Date	Builder	Date
10 Labadie Power Plant Rd. Labadie, MO 63055			
Address		Address	
(314) 554-2249			
Phone		Phone	

SITE DATA

1. Location: ---- 1/4; ---- 1/4; Section 17,20 ; Township 44N ; Range 2E
   Street Address 10 Labadie Power Plant Rd. Labadie, MO 63055
2. Type of Development: Filling _____ Grading _____ Excavation _____ Minimum Improvement _____
   Routine Maintenance _____ Substantial Improvement _____ New Construction X Other _____
3. Description of Development: Construction of utility waste landfill
4. Premises: Structure Size 4660 ft. By 4750 ft. Area of Site 14,400,000 Sq Ft
   Principal Use Utility waste storage Accessory Uses (storage, parking, etc.) ----
5. Value of Improvement (fair market) $ 14,000,000* Pre-Improvement/Assessed Value of Structure $ 0
6. Property Located in a Designated FLOODWAY? Yes (●) No ( ) Per October 18, 2011 FIRMs
   * Cost Estimate for First Phase
   IF ANSWERED YES, CERTIFICATION MUST BE PROVIDED PRIOR TO THE ISSUANCE OF A PERMIT TO DEVELOP, THAT THE PROPOSED DEVELOPMENT WILL RESULT IN NO INCREASE IN THE BASE (100-YEAR) FLOOD ELEVATIONS.
7. Property Located in a Designated Floodplain FRINGE? Yes (●) No ( )
8. Elevation of the 100-Year Flood (ID source) 482.5 - 483.5 Franklin County FIS, October 18, 2011 NAVD88 MSL/NGVD
9. Elevation of the Proposed Development Site 465 NGVD29 MSL/NGVD
10. Local Ordinance Elevation/Floodproofing Requirement N/A MSL/NGVD
11. Other Floodplain Elevation Information (ID and describe source) N/A
12. Other Permits Required?

Corps of Engineer 404 Permit:	Yes ( )	No ( )	Provided ( )
State Department of Natural Resources 401 Permit:	Yes ( )	No ( )	Provided ( )
Environmental Protection Agency NPDES Permit:	Yes ( )	No ( )	Provided ( )

All Provisions of Ordinance Number _____ , the "Floodplain Management Ordinance", shall be in Compliance.

PERMIT APPROVAL/DENIAL

Plans and Specifications Approved/Denied this _____ Day of _____ , 20____

Signature of Developer/Owner	Authorizing Official
Barb Skit, Managing Supervisor, Real Estate	
Print Name and Title	Print Name and Title

THIS PERMIT IS ISSUED WITH THE CONDITION THAT THE LOWEST FLOOR (INCLUDING BASEMENT FLOOR) OF ANY NEW OR SUBSTANITALLY IMPROVED RESIDENTIAL BUILDING WILL BE ELEVATED _____ FOOT/FEET ABOVE THE BASE FLOOD ELEVATION. IF THE PROPOSED DEVELOPMENT IS A NON-RESIDENTIAL BUILDING, THIS PERMIT IS ISSUED WITH THE CONDITION THAT THE LOWEST FLOOR (INCLUDING BASEMENT) OF A NEW OR SUBSTANITALLY IMPROVED NON-RESIDENTIAL BUILDING WILL BE ELEVATED OR FLOODPROOFED _____ FOOT/FEET ABOVE THE BASE FLOOD ELEVATION.

THIS PERMIT IS USED WITH THE CONDTION THAT THE DEVELOPER/OWNER WILL PROVIDE CERTIFICATION BY A REGISTERED ENGINEER, ARCHITECT, OR LAND SURVEYOR OF THE "AS-BUILT" LOWEST FLOOR (INCLUDING BASEMENT) ELEVATION OF ANY NEW OR SUBSTANTIALLY IMPROVED BUILDING COVERED BY THIS PERMIT

APPENDIX E

SEMA Engineering “No-Rise” Certificate

MISSOURI STATE EMERGENCY MANAGEMENT AGENCY

ENGINEERING "NO-RISE" CERTIFICATE

Floodplain Development Permit No. _____

SECTION A - PROPERTY OWNER INFORMATION

COMMUNITY	COUNTY	STATE
Unincorporated	Franklin	MO

APPLICANT	DATE
Ameren Missouri	9/21/2011

APPLICANT'S ADDRESS	PHONE
10 Labadie Power Plant Rd. Labadie, MO 63055	314-554-2249

SECTION B – ENGINEER INFORMATION

ENGINEER	DATE
CDG Engineers, Mark Birchler, P.E., R.L.S., CFM	9/21/2011

ENGINEER'S ADDRESS	PHONE
One Campbell Plaza, Suite 3A St. Louis, MO 63139	314-781-7770

SECTION C – SITE DATA

1. Location:

____ ¼	____ ¼	SECTION	TOWNSHIP	RANGE	STREET ADDRESS
		17,20	44N	2E	10 Labadie Power Plant Rd. Labadie, MO 63055

2. Panel(s) No. of NFIP Map(s) affected: 29071C0185D, 29071C0195D 29071C0180D, 29071C0190D (Effective October 18, 2011

3. Type of development:
☐ Filling ☐ Grading ☐ Excavation ☐ Min. Improvements ☐ Routine Maintenance
☐ Substantial Improvement ☒ New Construction ☐ Other (Describe):

4. Description of Development:

Construction of a utility waste landfill

5. Name of Flooding Source Affected:

SECTION D - COMMENTS

Comments:

See attached "Floodplain Analysis of the Missouri River"

This is to certify that I am a duly qualified engineer licensed to practice in the State of MO. It is to further certify that the attached technical data supports the fact that the proposed development described above will not create any increase to the 1% storm frequency water surface flood elevations on said flooding source above at the published cross-sections in the flood insurance study for the above community dated 10/18/2011, and will not create any increase to the 1% storm frequency water surface flood elevations at the unpublished cross-sections in the vicinity of the proposed development.

Embossed Seal or Stamp and Signature

Signature	Date
Principal	E19143
Title	License No.

Job No. SPM=

APPENDIX F

Relevant Correspondence for
Current Effective Model

CDG ENGINEERS
CDG Engineers Architects Planners, Inc.

One Campbell Plaza
St. Louis, Missouri 63139
T. 314 781 7770 F 314 781 9075

www.cdgengineers.com

May 11, 2011

Mr. Jason Schneider
GREENHORNE & O'MARA
Suite 360
6800 College Park Blvd
Overland Park, Kansas 66211-1564

RE: Missouri River
Official FEMA HEC-RAS Model
CDG Project No. 11042

Dear Mr. Schneider:

CDG Engineers requests the file containing the official draft HEC-RAS model of the Missouri River that covers the area between River Mile 50 to River Mile 65, used to develop the new Federal Insurance Rate Maps (FIRMs) and the Flood Insurance Study (FIS). This area is in Franklin County and St Charles County, Missouri. I realize this model has not become the effective model yet.

I spoke with Mr. Rick Nusz of FEMA and he instructed me to contact you directly to obtain this model. CDG Engineers is evaluating the need to prepare a LOMR for this area. If our analysis indicates a LOMR is necessary, we will submit an application prior to the release of the new maps. We hope to submit the application sufficiently in advance of the effective date of the new maps to allow the effective date of the LOMR to be set as one day after the effective date of the new maps.

Feel free to send this to me via e-mail at entwistle@cdgengineers.com. Please contact me at (314) 446-3542 if additional clarification is necessary. Thank you for your help.

Sincerely,

CDG Engineers Architects Planners, Inc.

Teresa L Entwistle, P.E., CFM
Assistant Project Manager

cc: Mark Birchler, CDG Engineers

Terry Entwistle - eFTP: Missouri River UMRFFS HEC-RAS Model

From: <jschneider@g-and-o.com>
To: <entwistle@cdgengineers.com>, <jschneider@g-and-o.com>
Date: 5/23/2011 12:07 PM
Subject: eFTP: Missouri River UMRFFS HEC-RAS Model

A file has been uploaded to the eFTP site for you by jschneider@g-and-o.com. To download, click on the link below. You have 7 days to download the file before it's deleted from the server. NOTE: .ZZZ files must have their extensions changed to .ZIP before opening.

Click on this link to download the file.

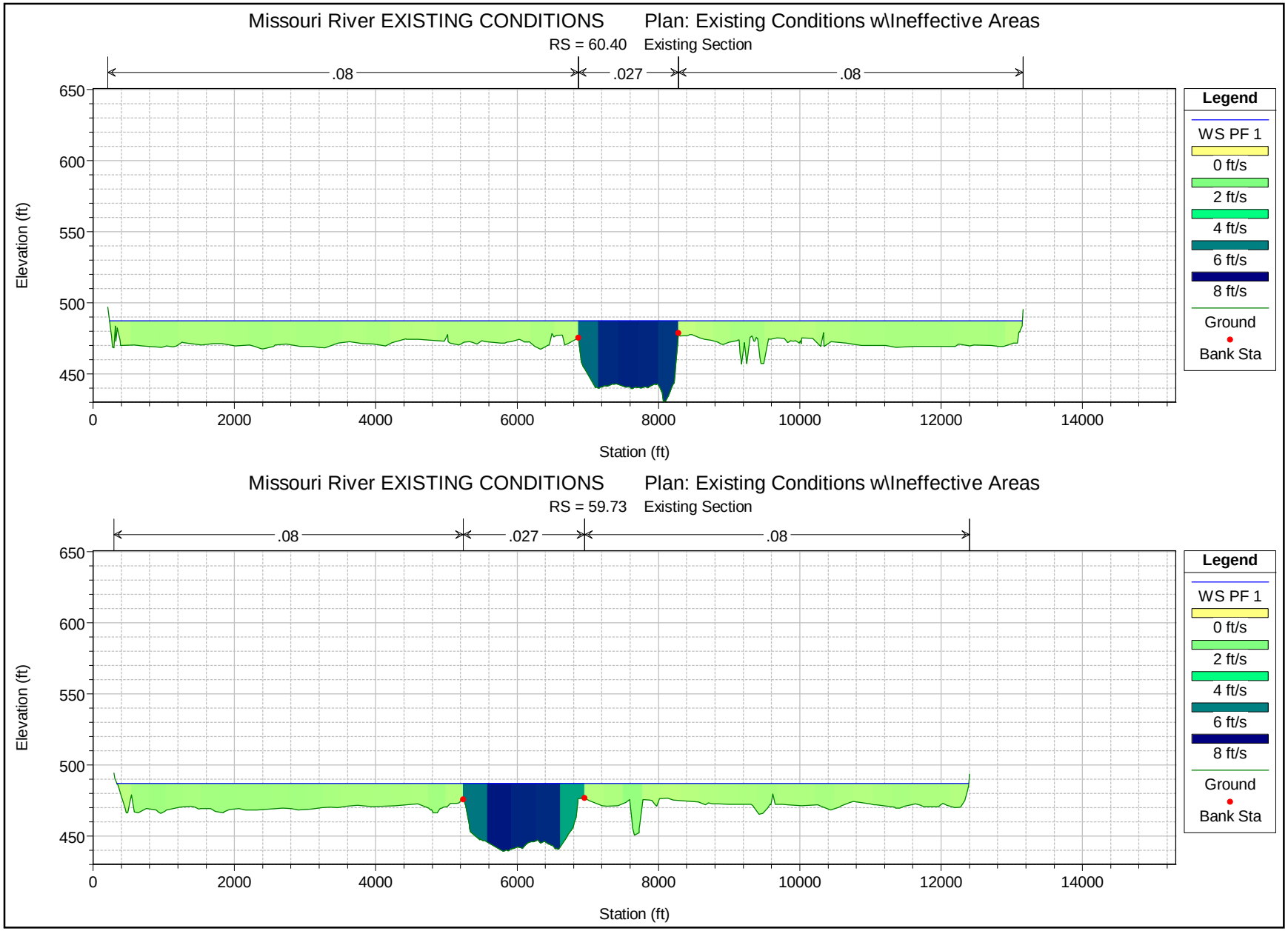
If the above link does not work, go to http://www.floodmaps.net/eftp/download.php and enter the following filename:

357162475_Hydraulics.zzz

Message from the user: Attached are the HEC-RAS Models for the Missouri River.

APPENDIX G

Velocity Sections
Existing Conditions
Floodway Off
674,000 cfs



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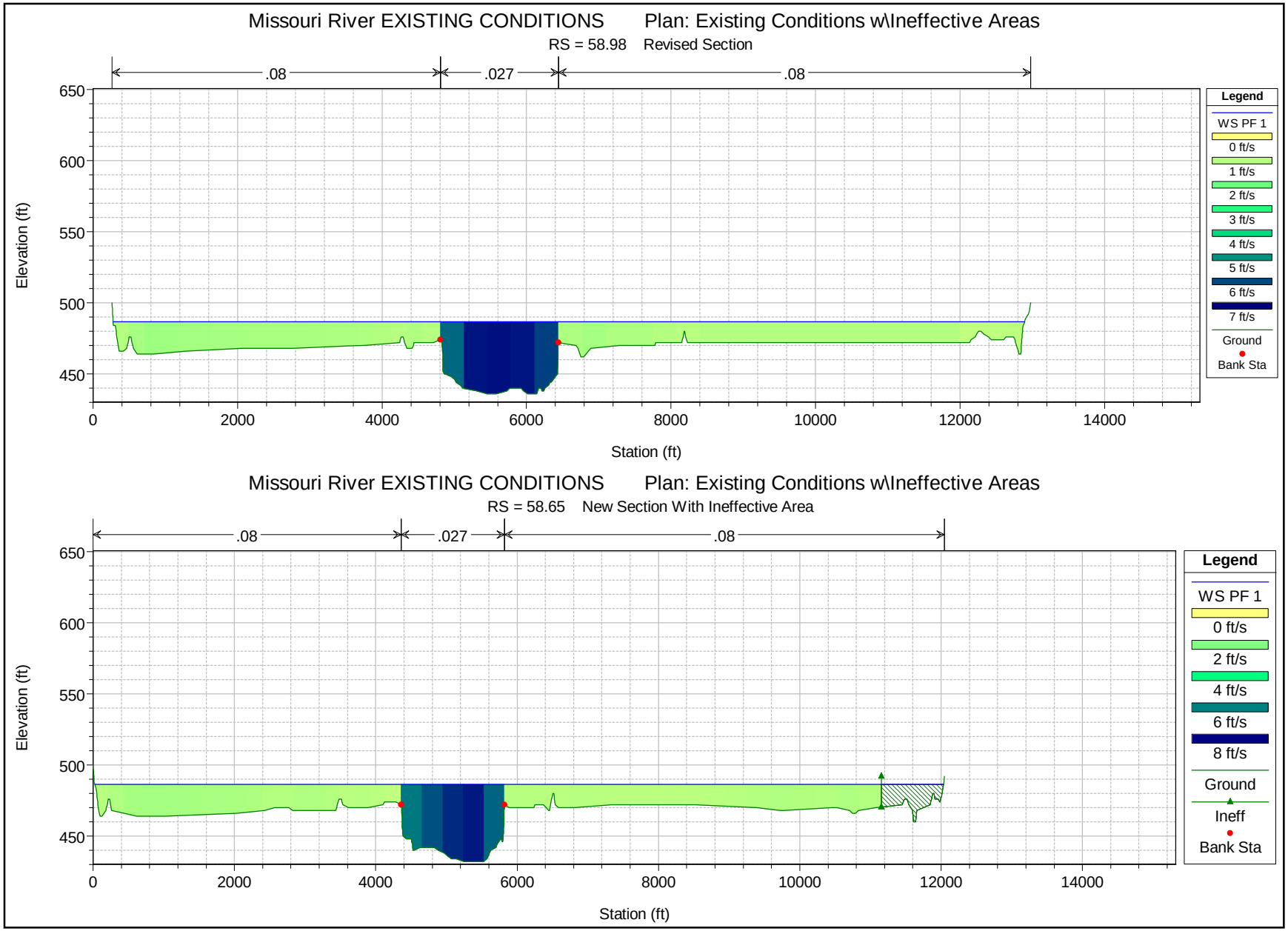

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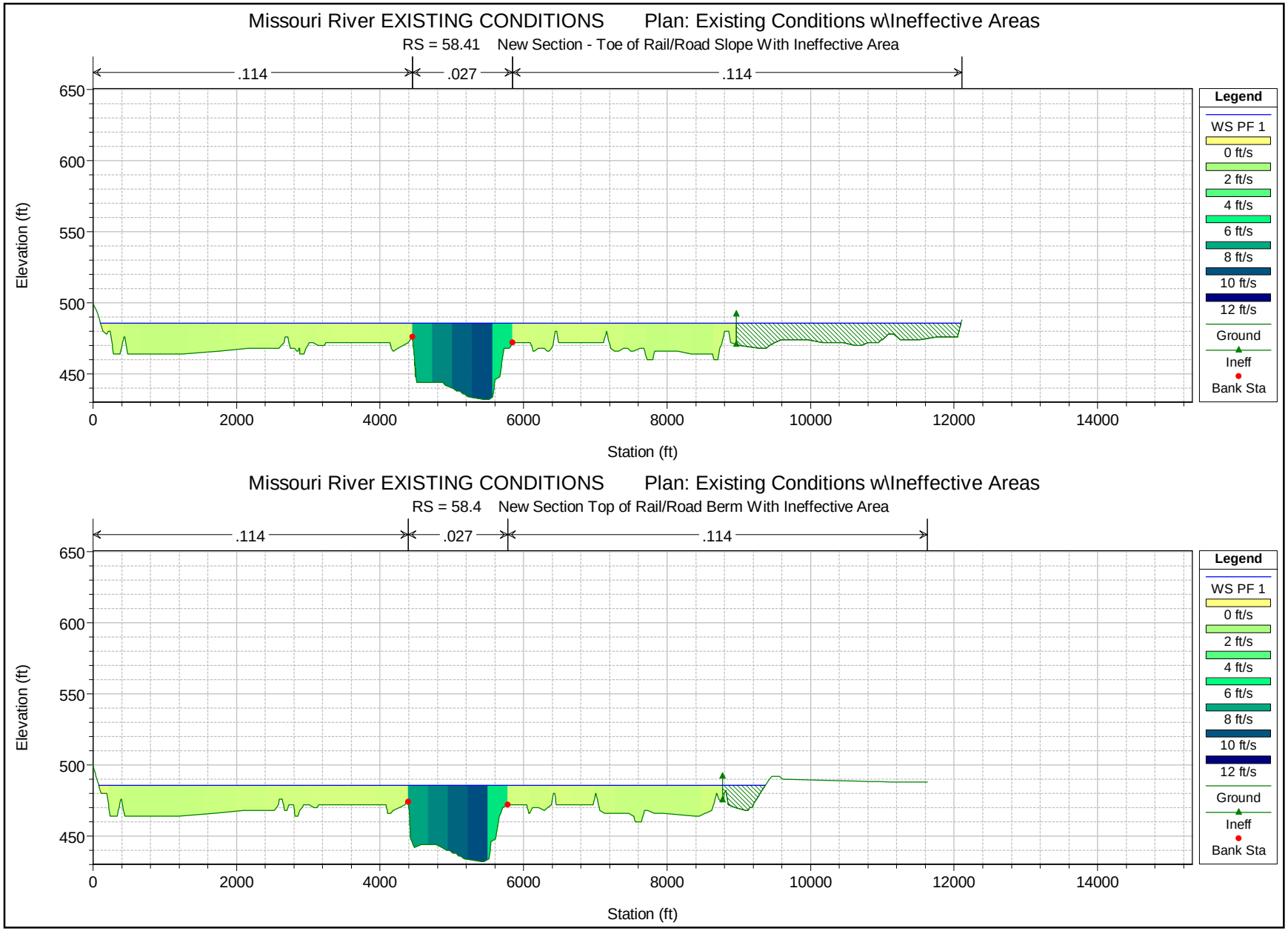

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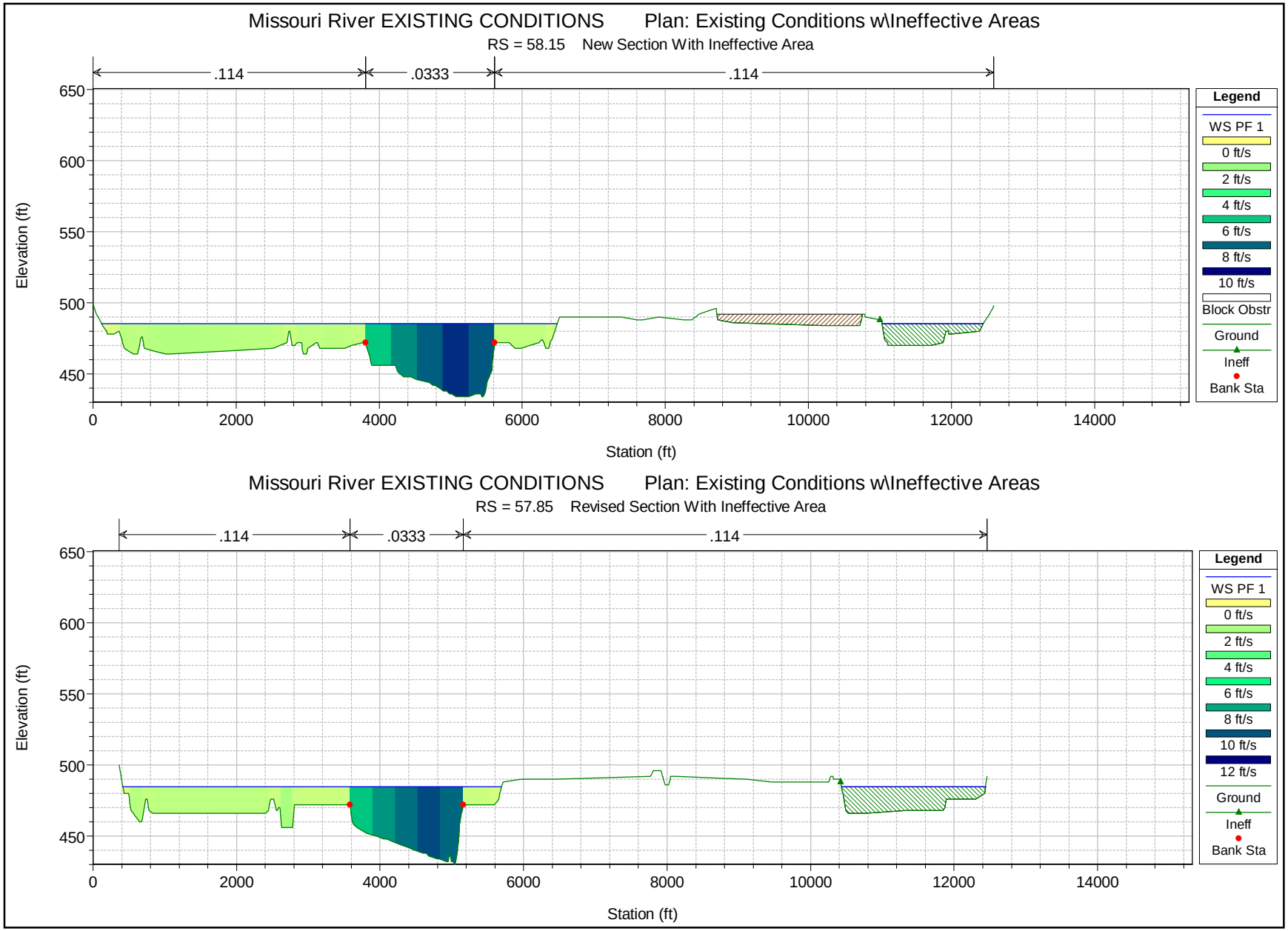

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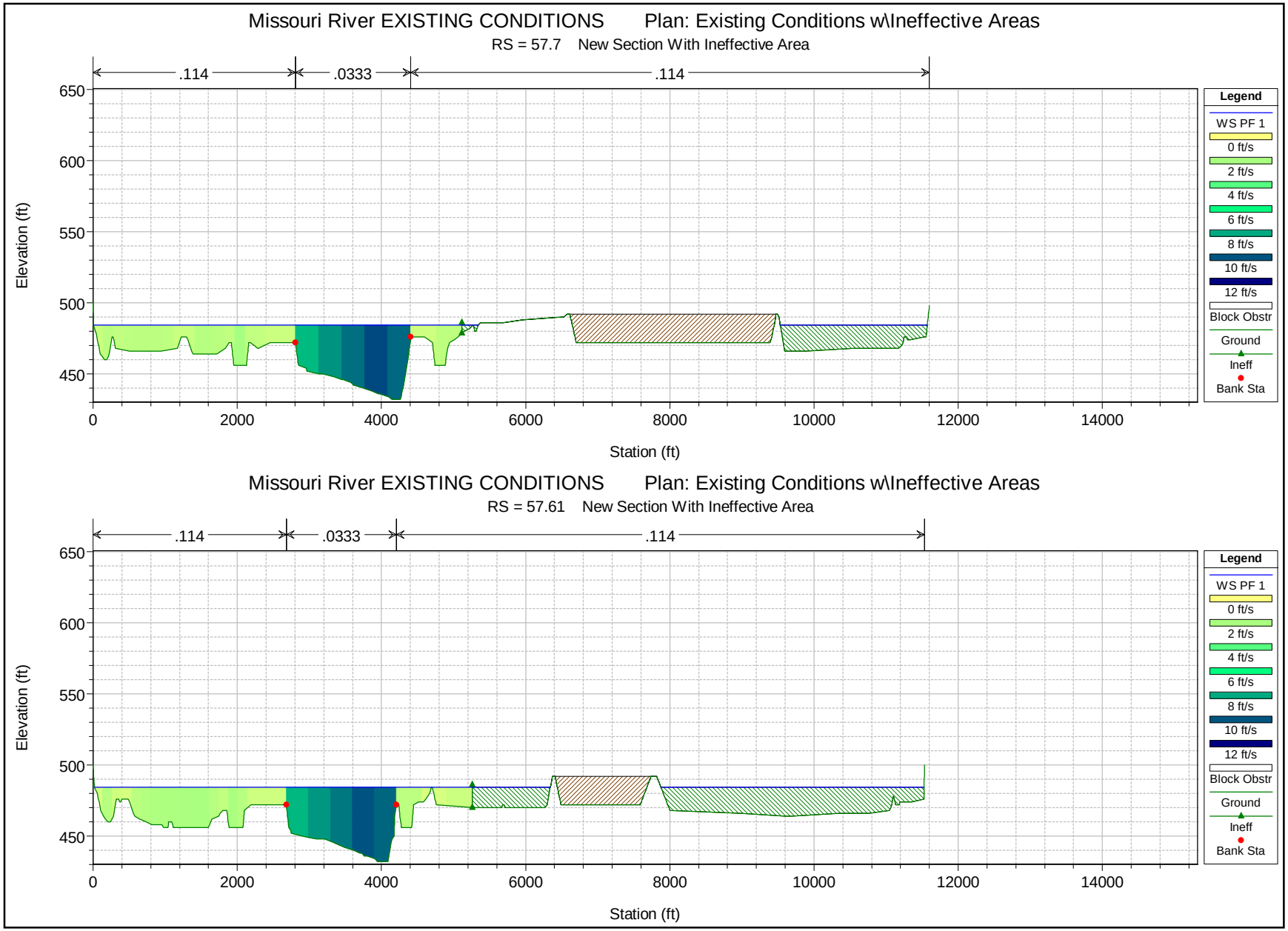

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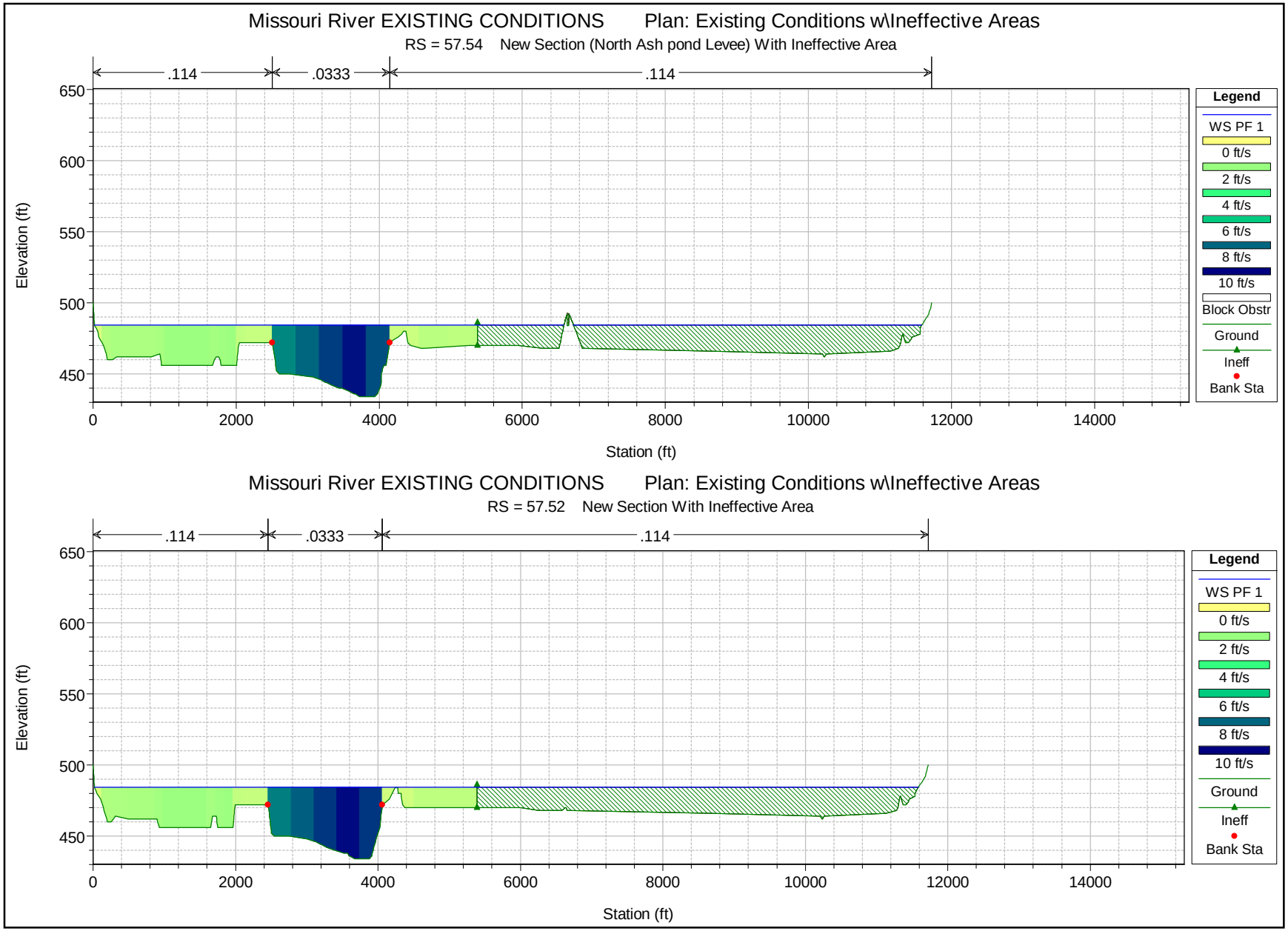

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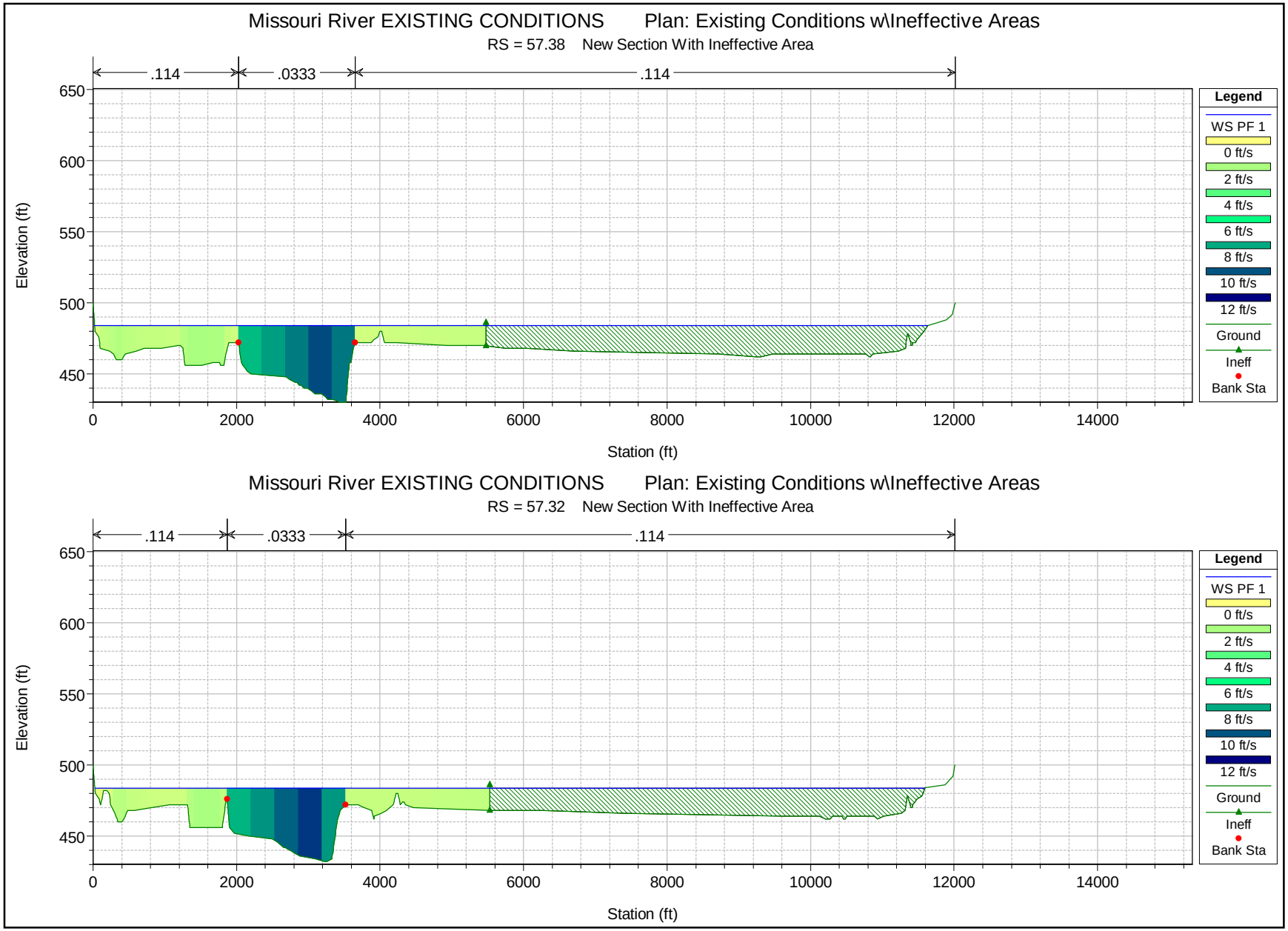

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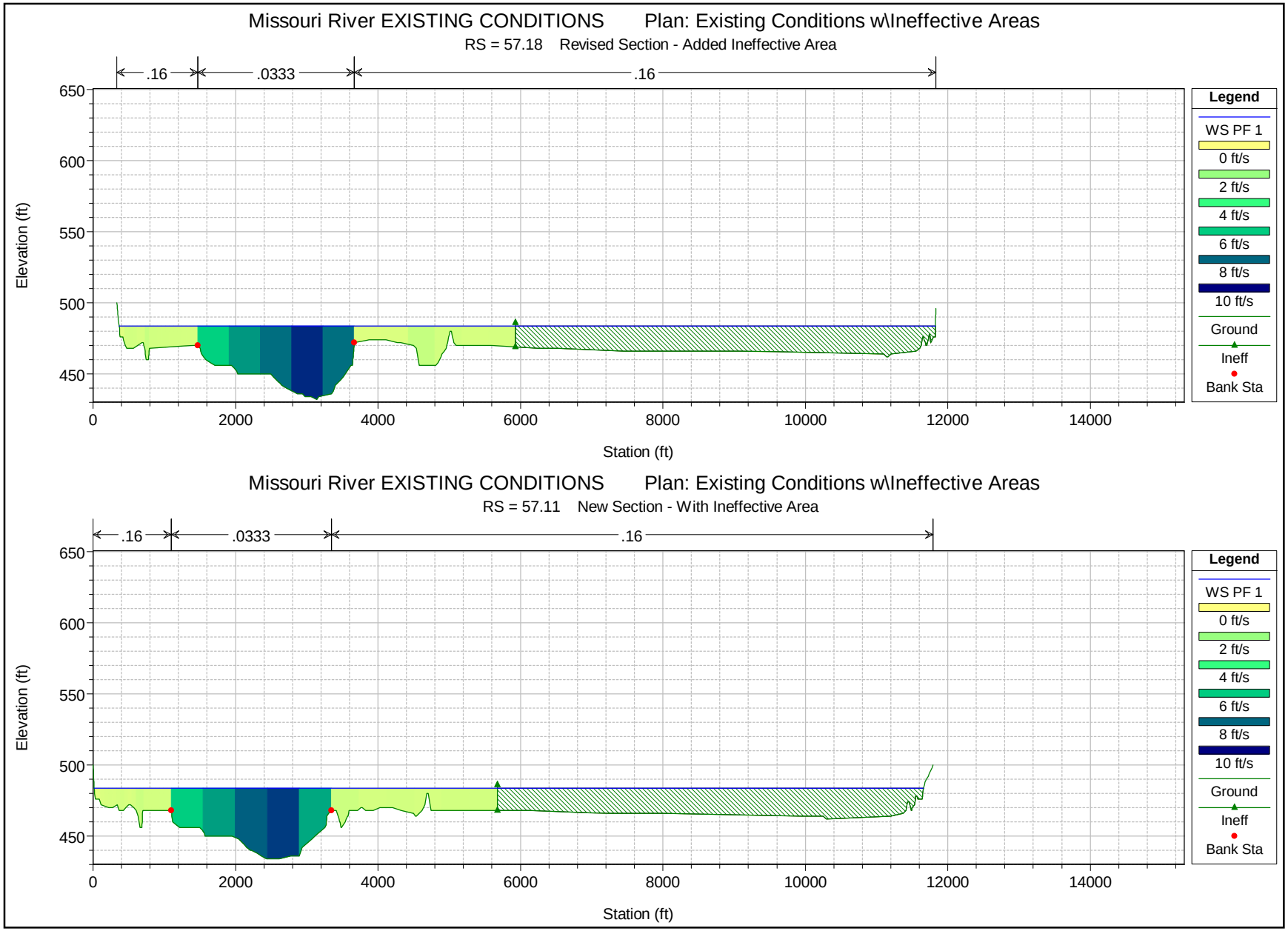

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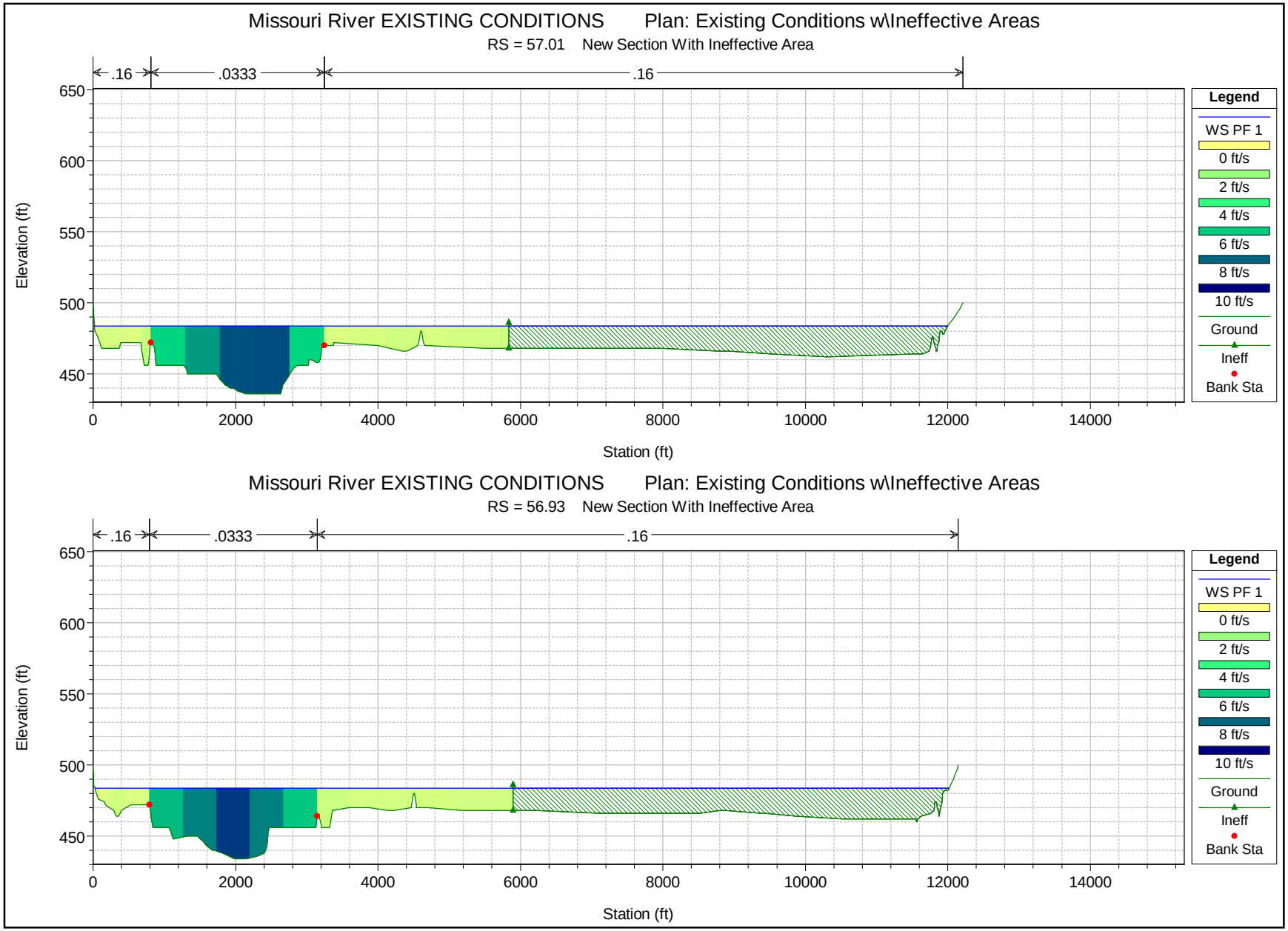

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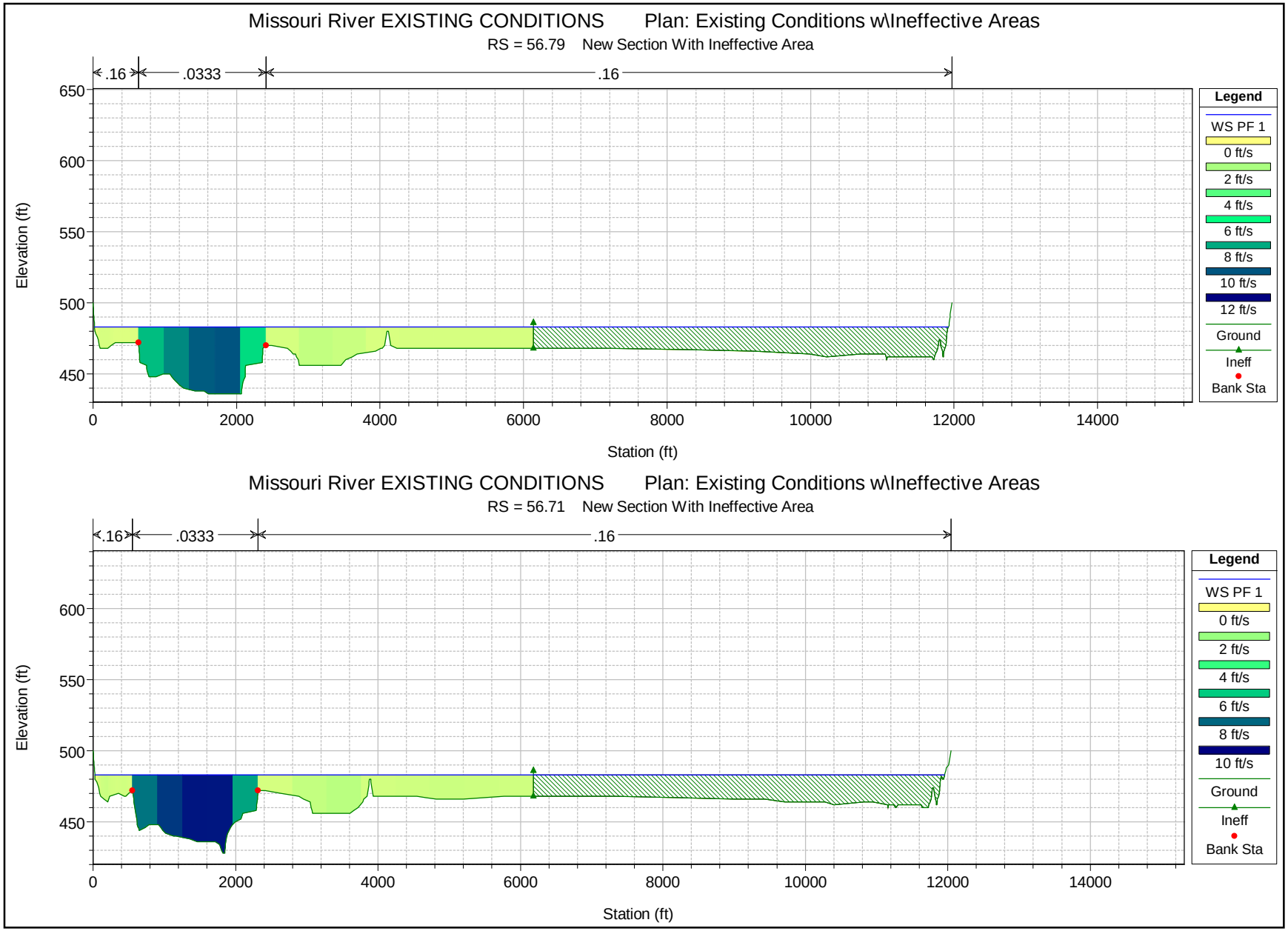

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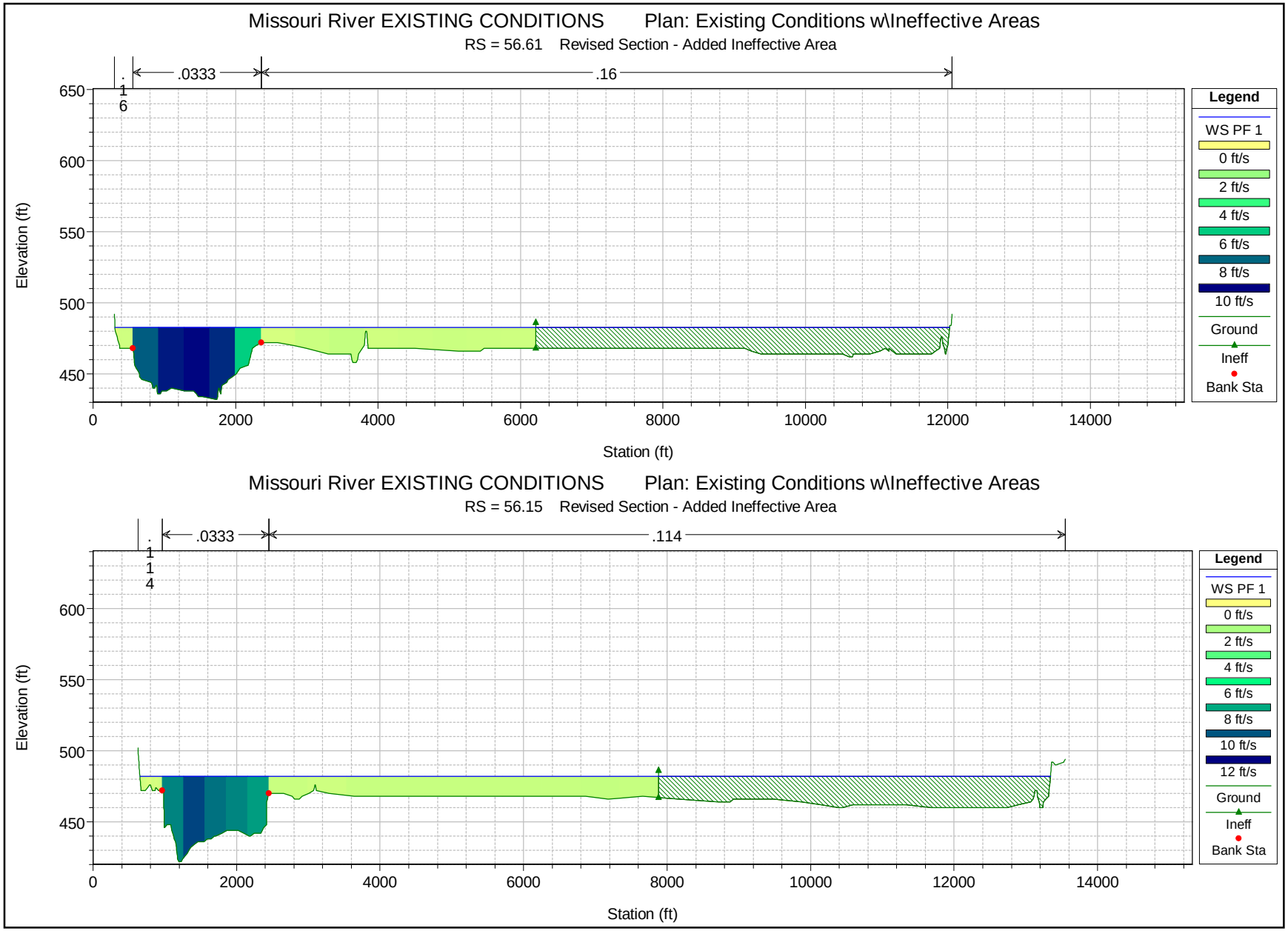
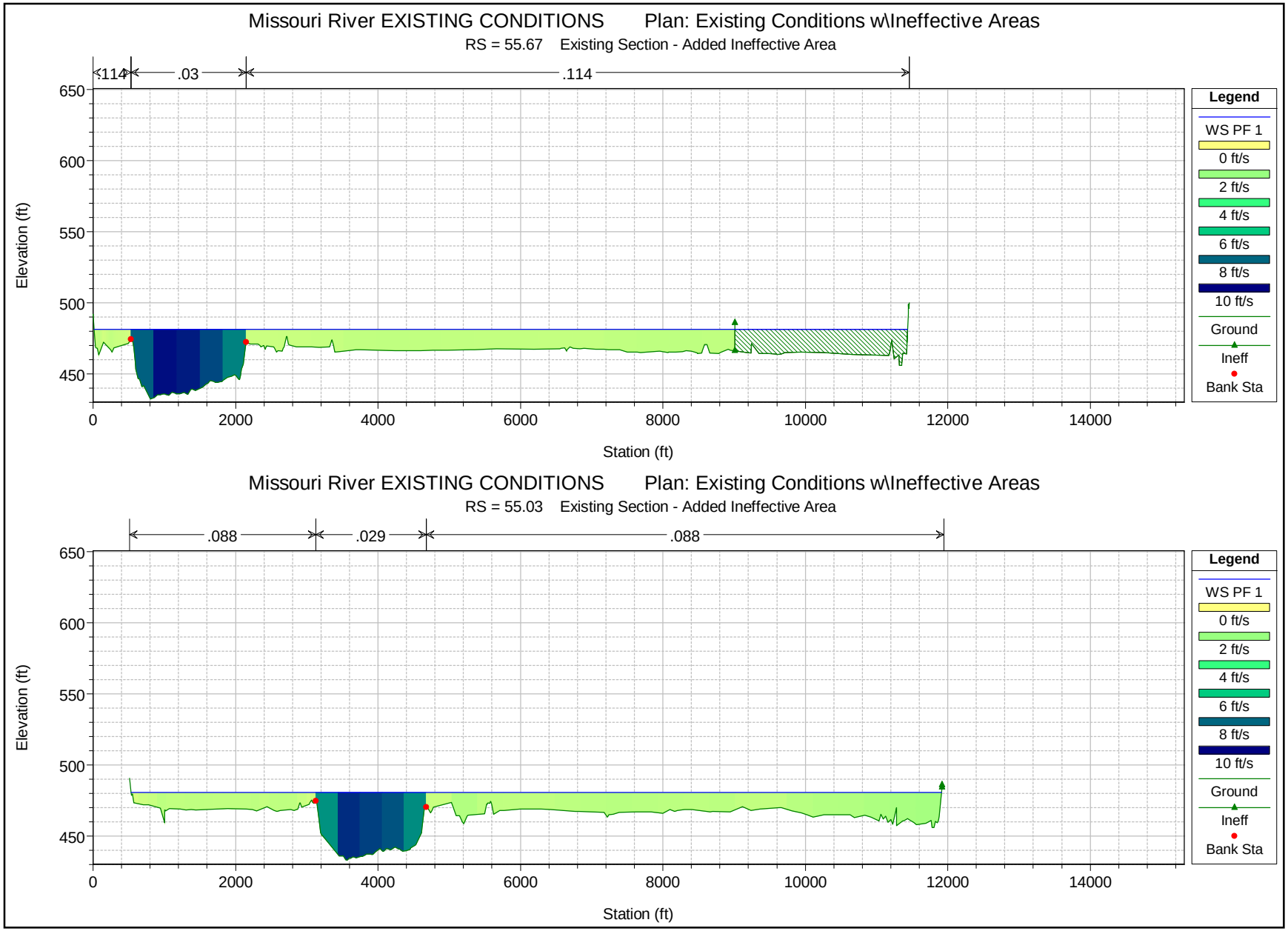


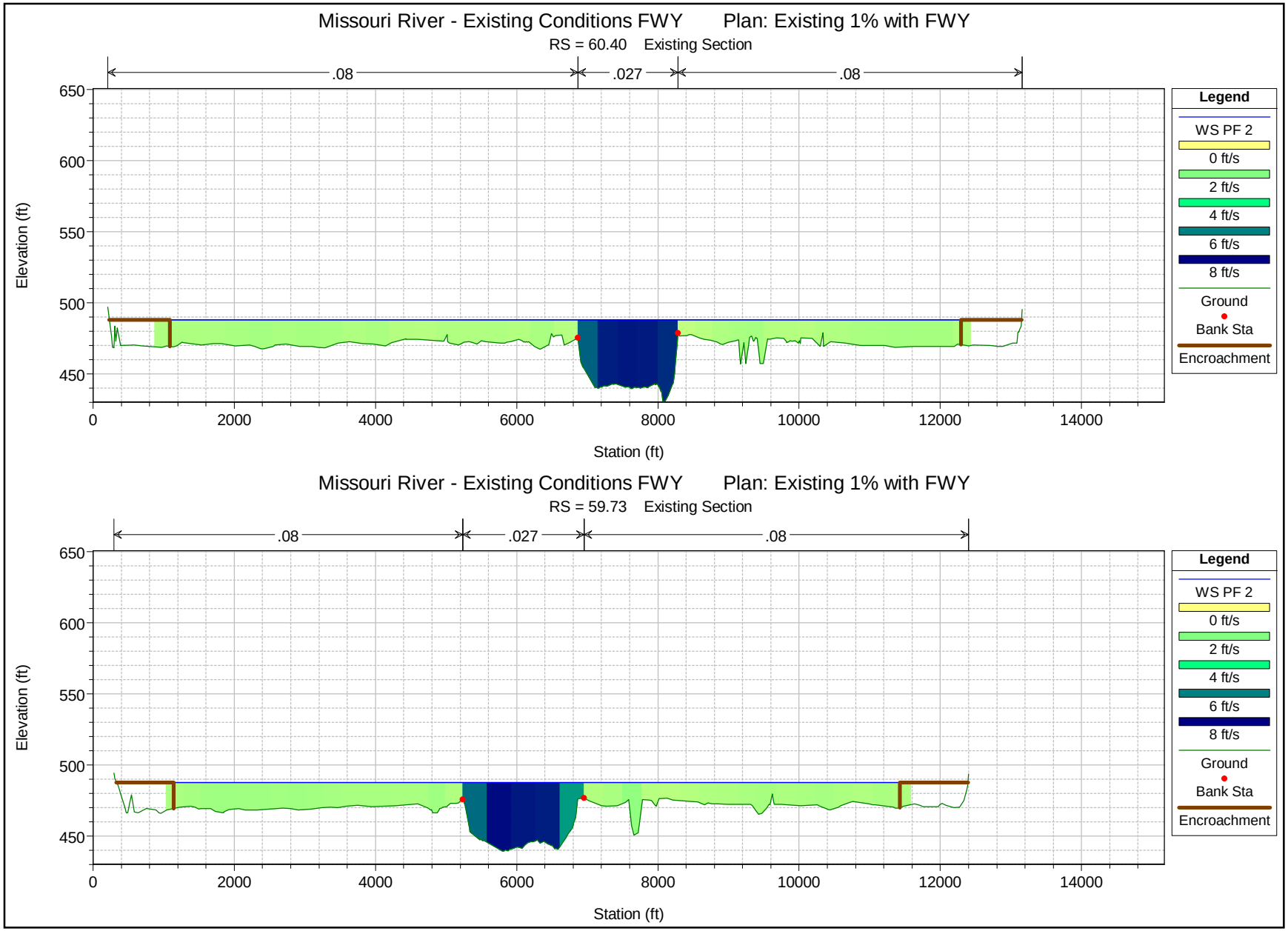
1 in Horiz. = 2000 ft 1 in Vert. = 100 ft



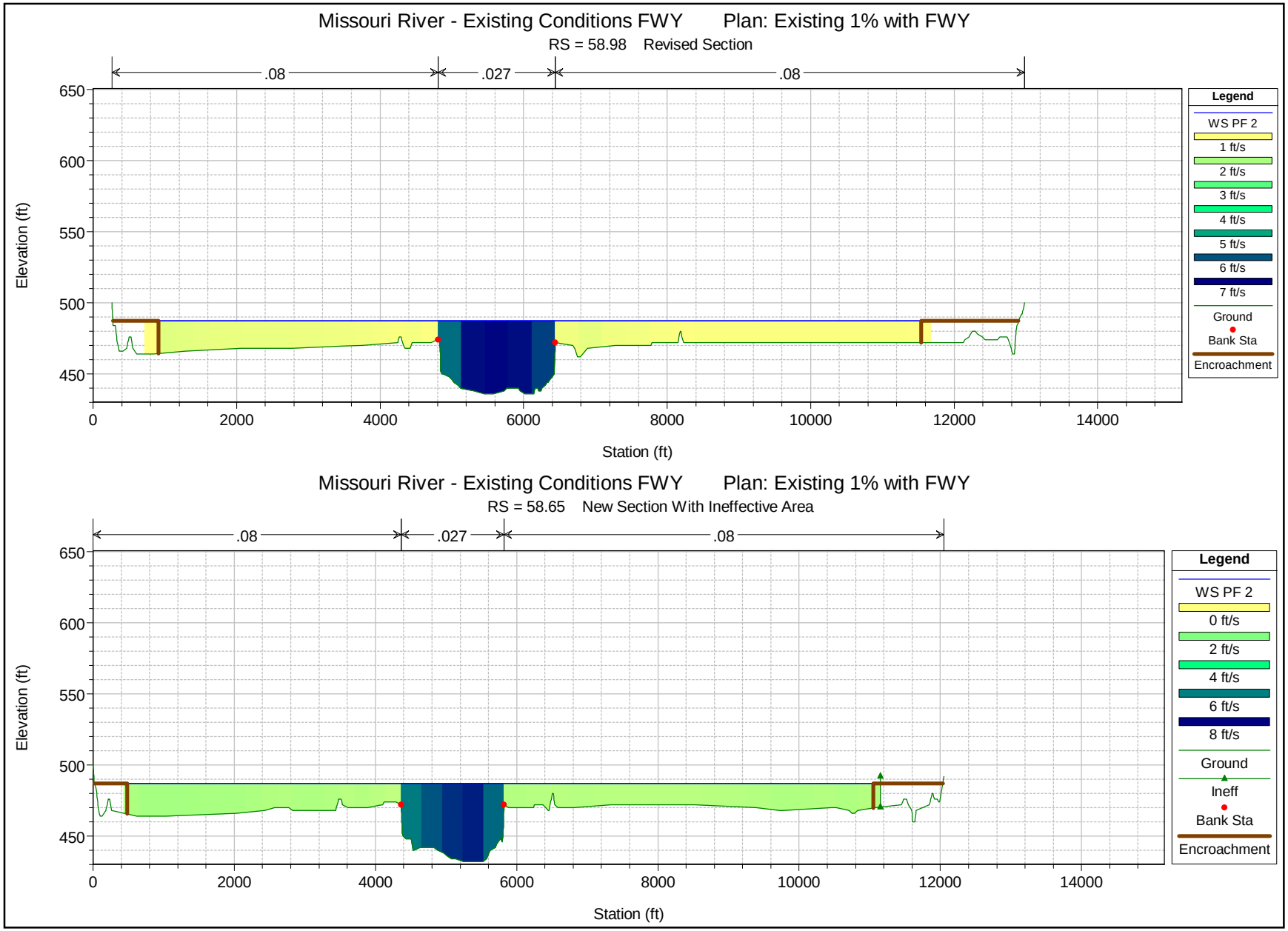
1 in Horiz. = 2000 ft 1 in Vert. = 100 ft

APPENDIX H

Velocity Sections
Existing Conditions
Floodway On
674,000 cfs



1 in Horiz. = 2000 ft 1 in Vert. = 100 ft



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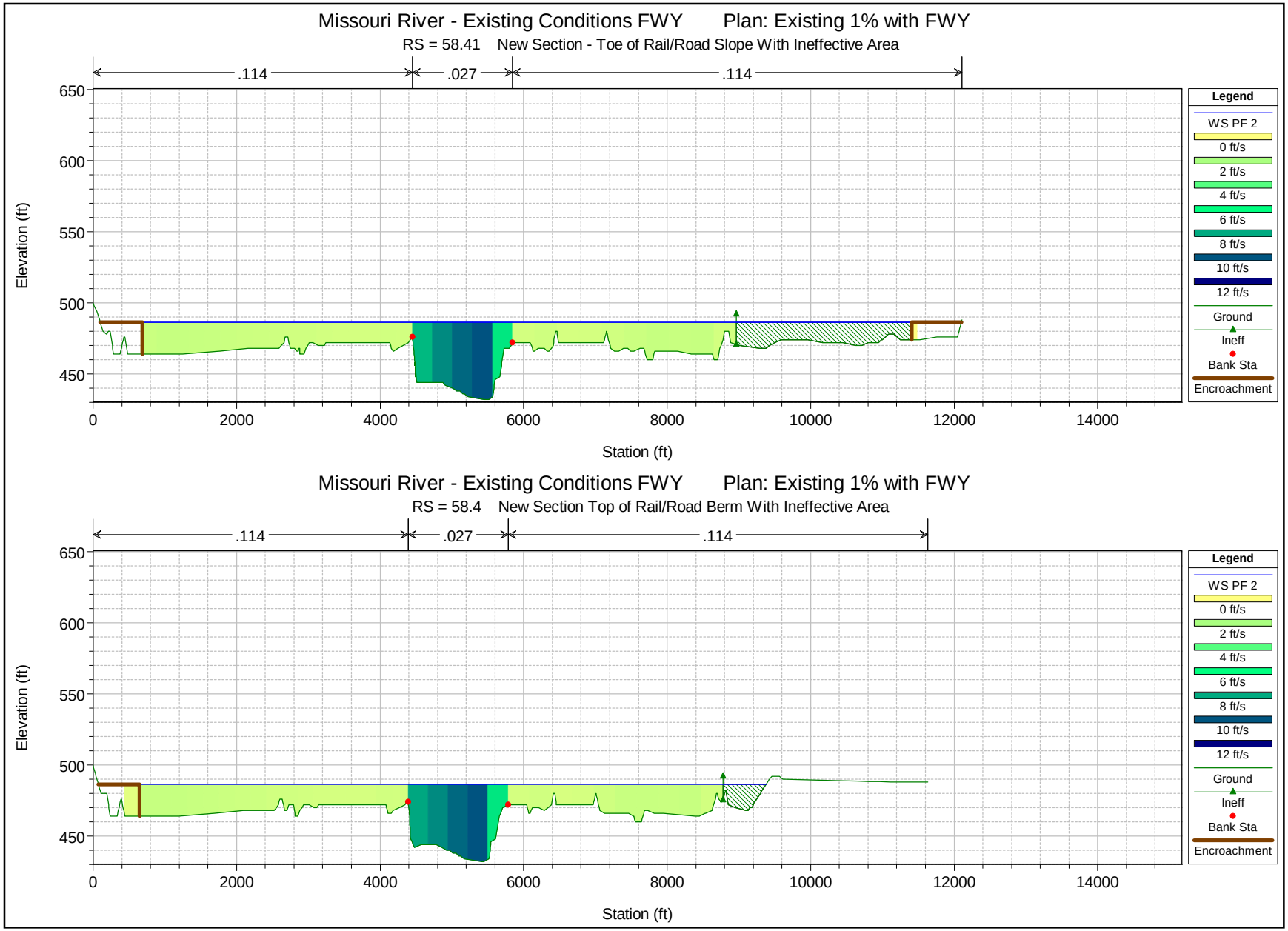

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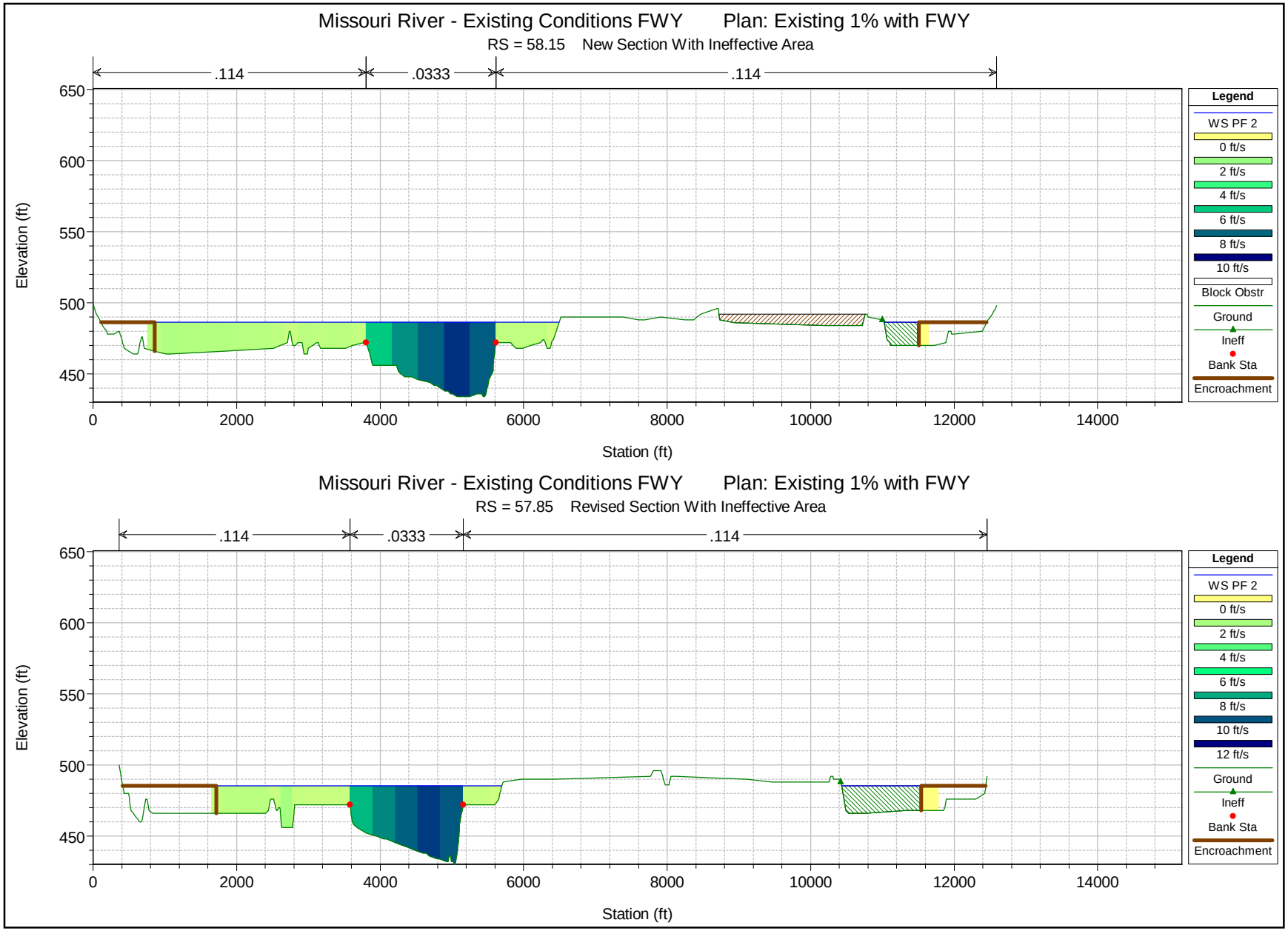

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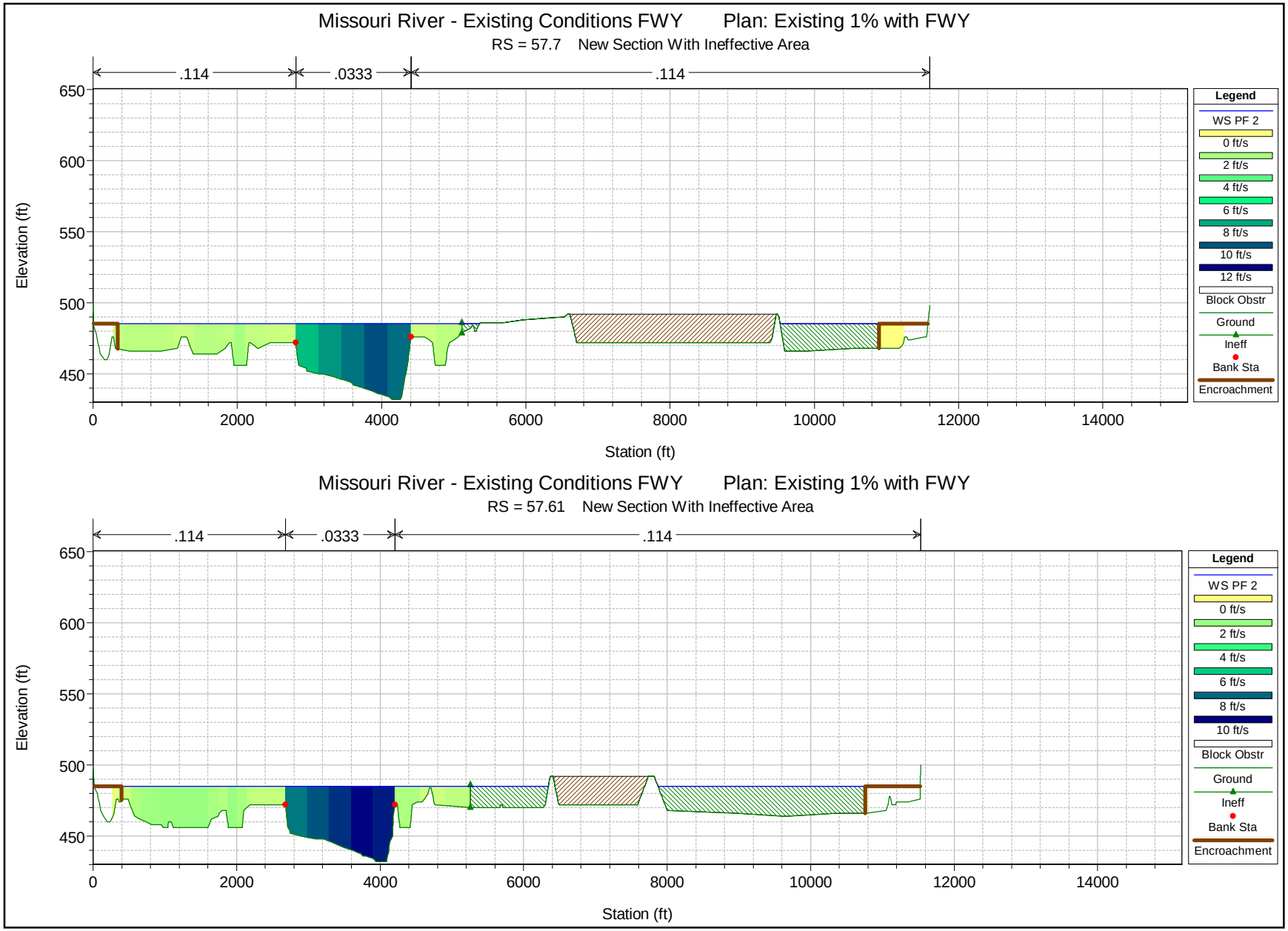

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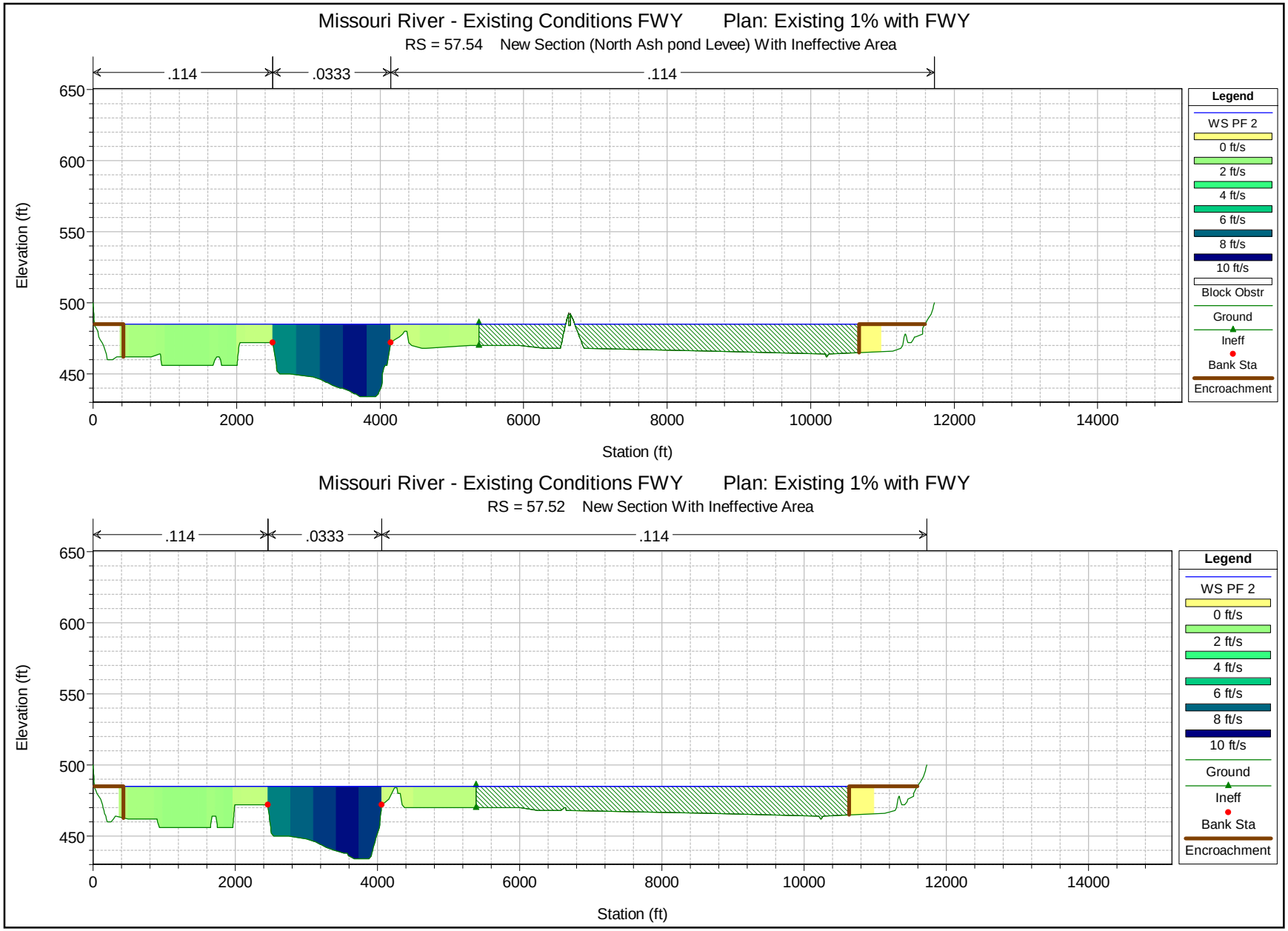

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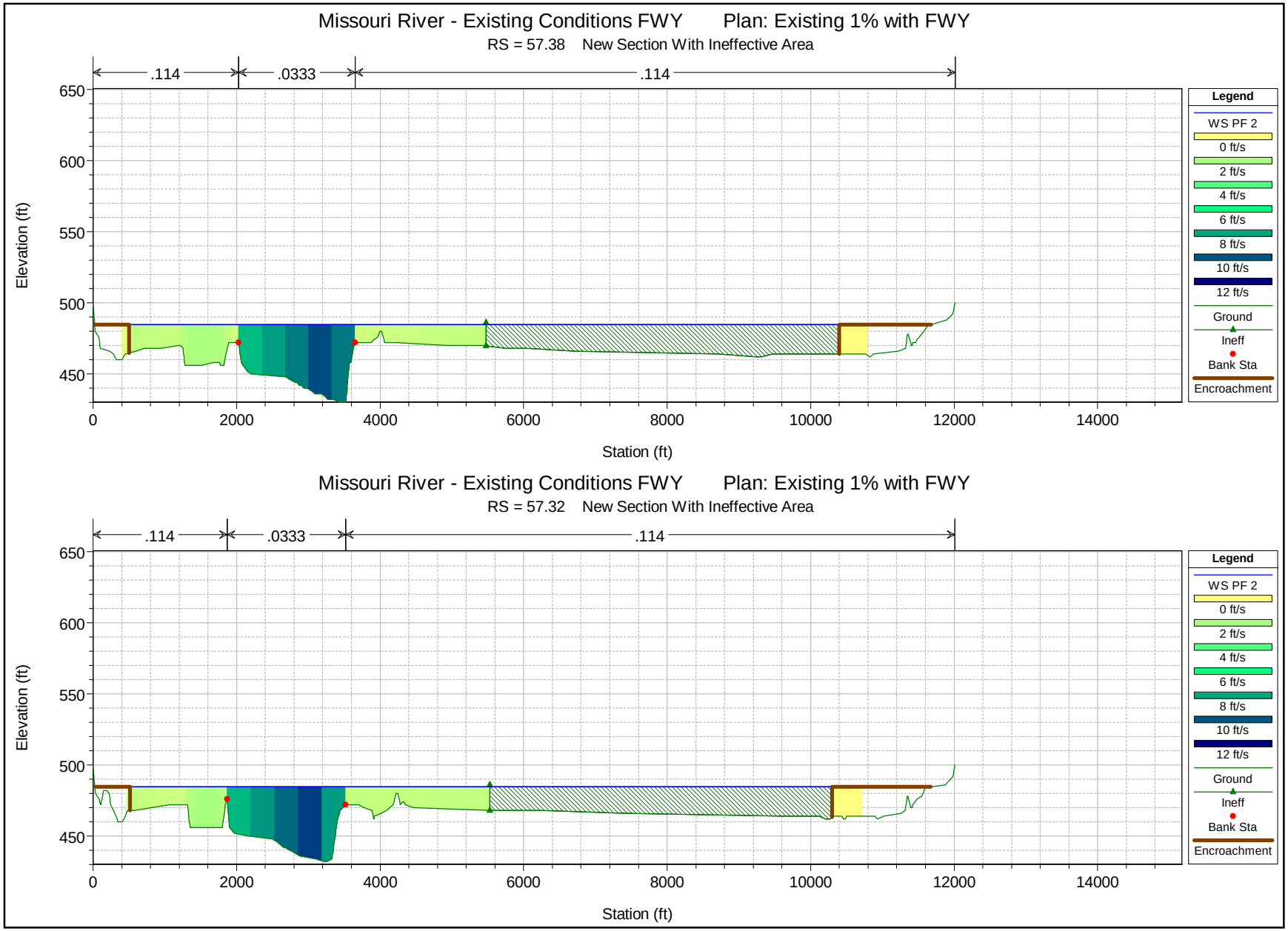

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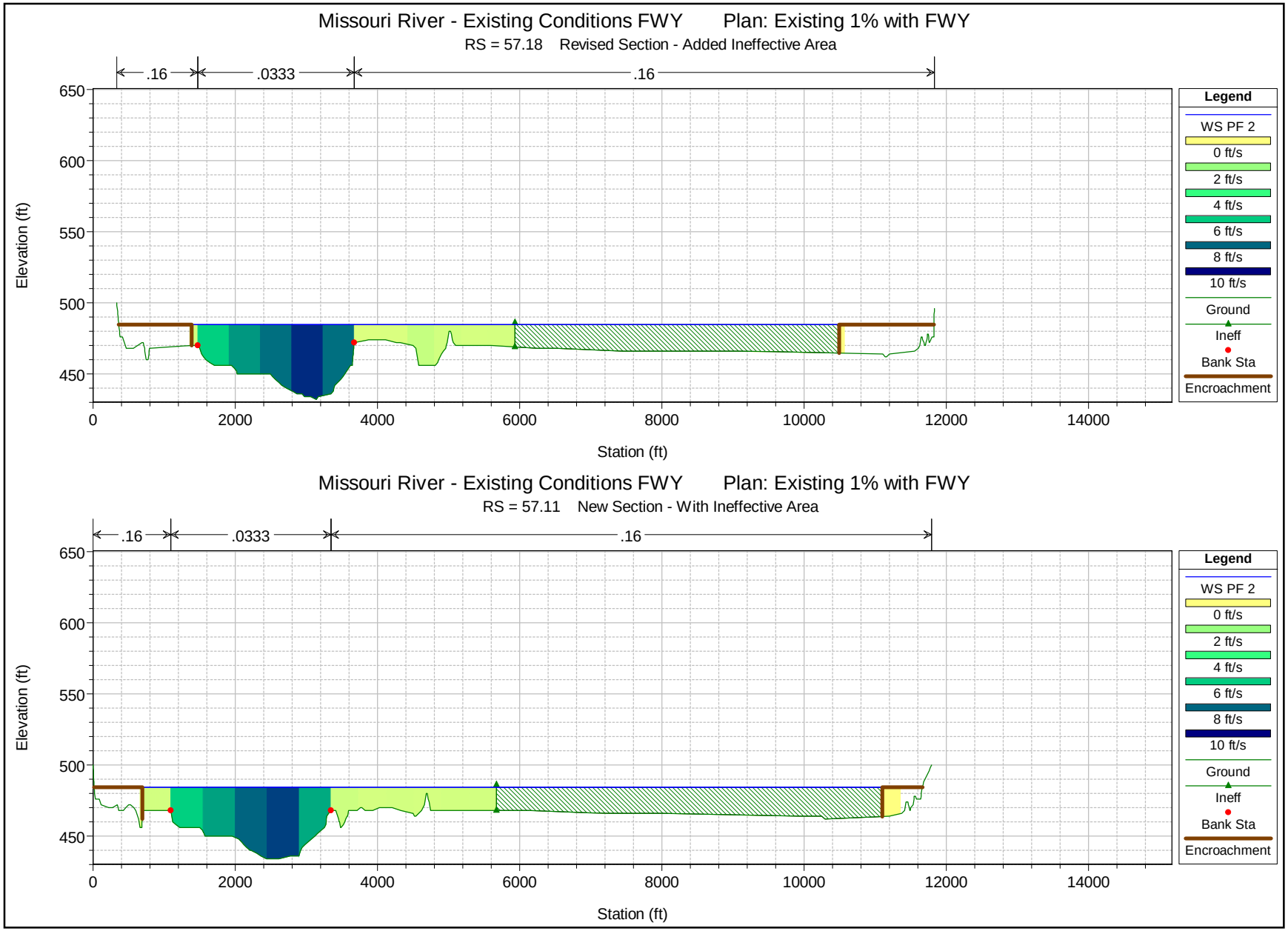

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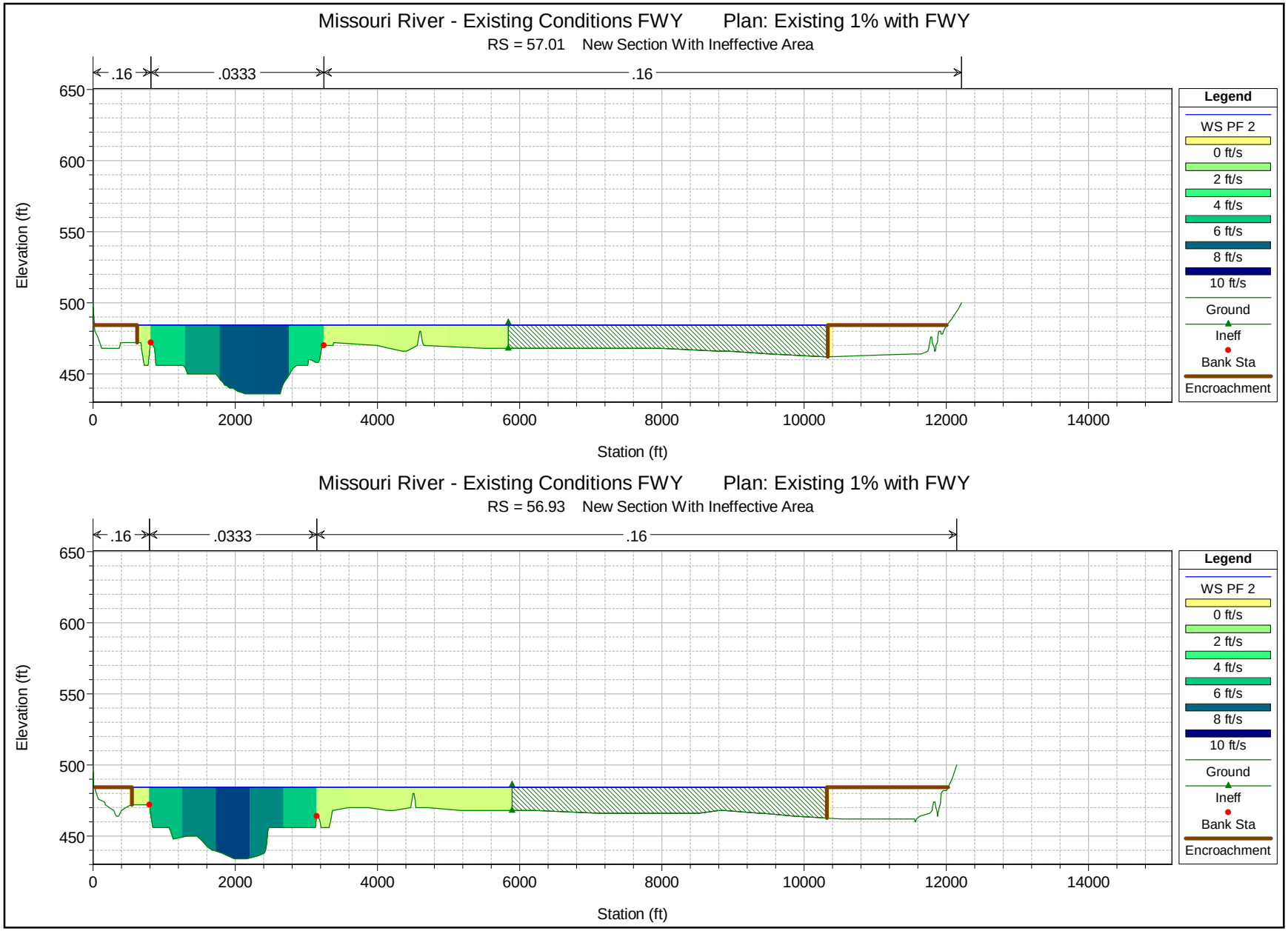

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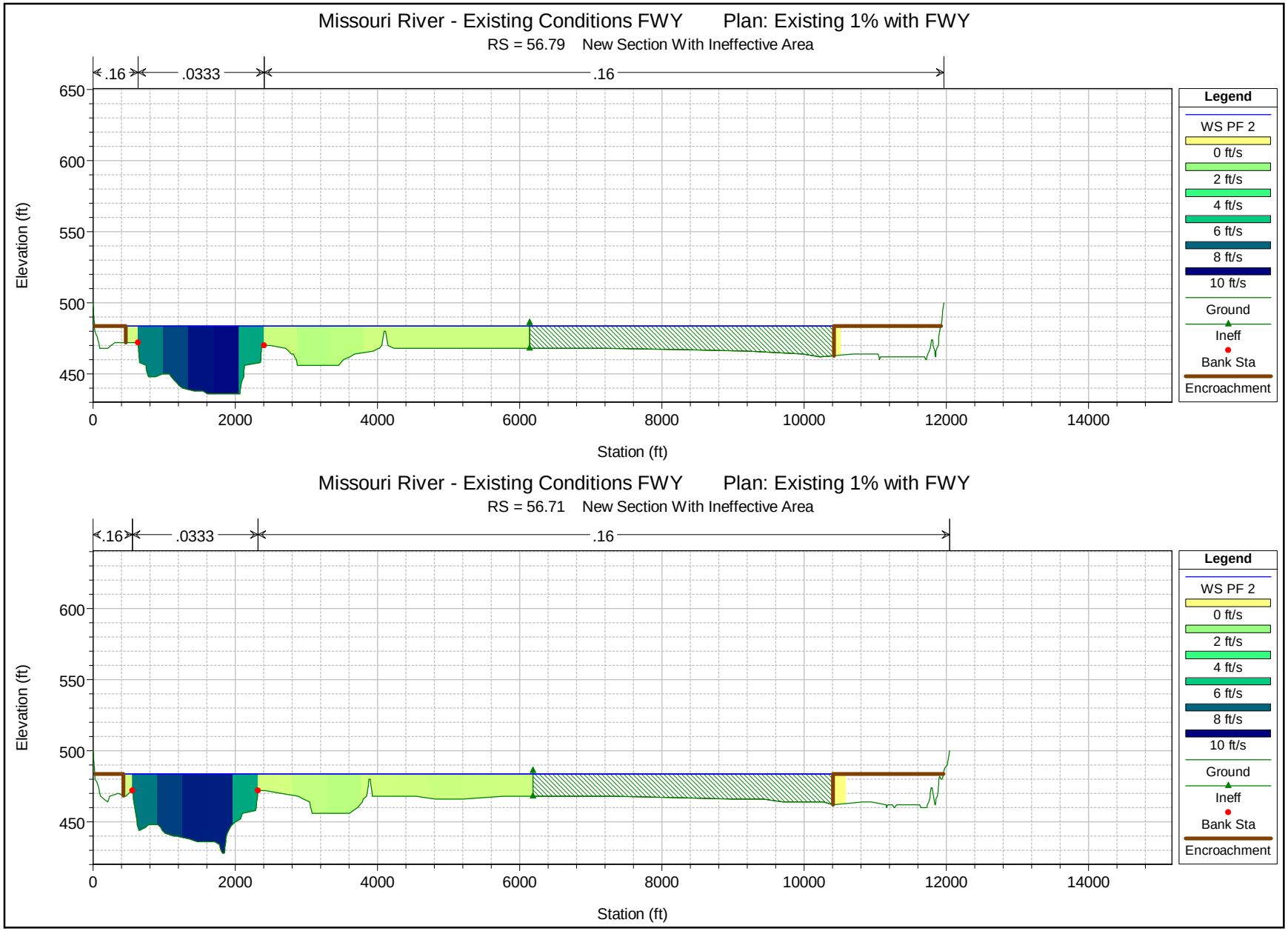

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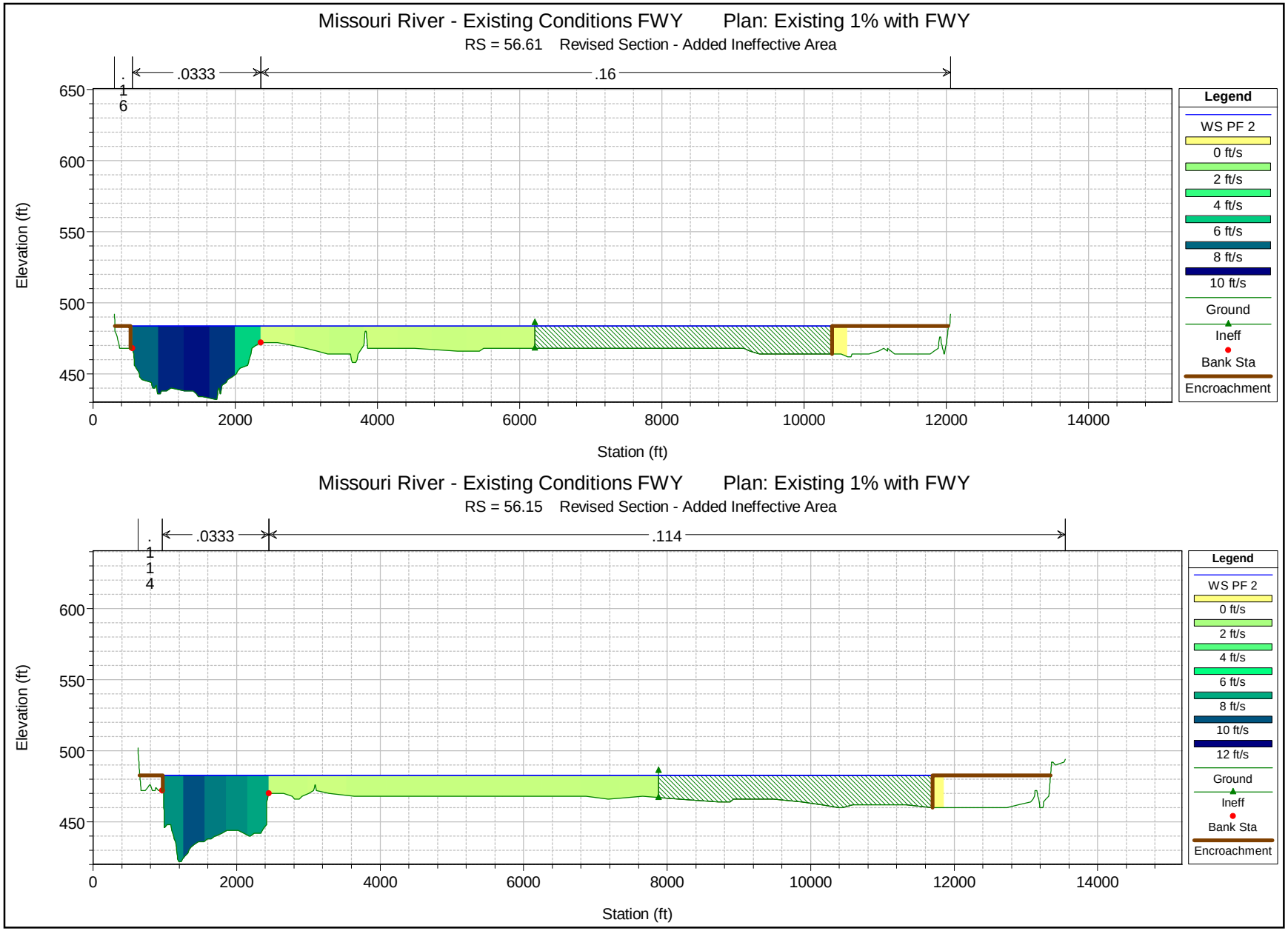

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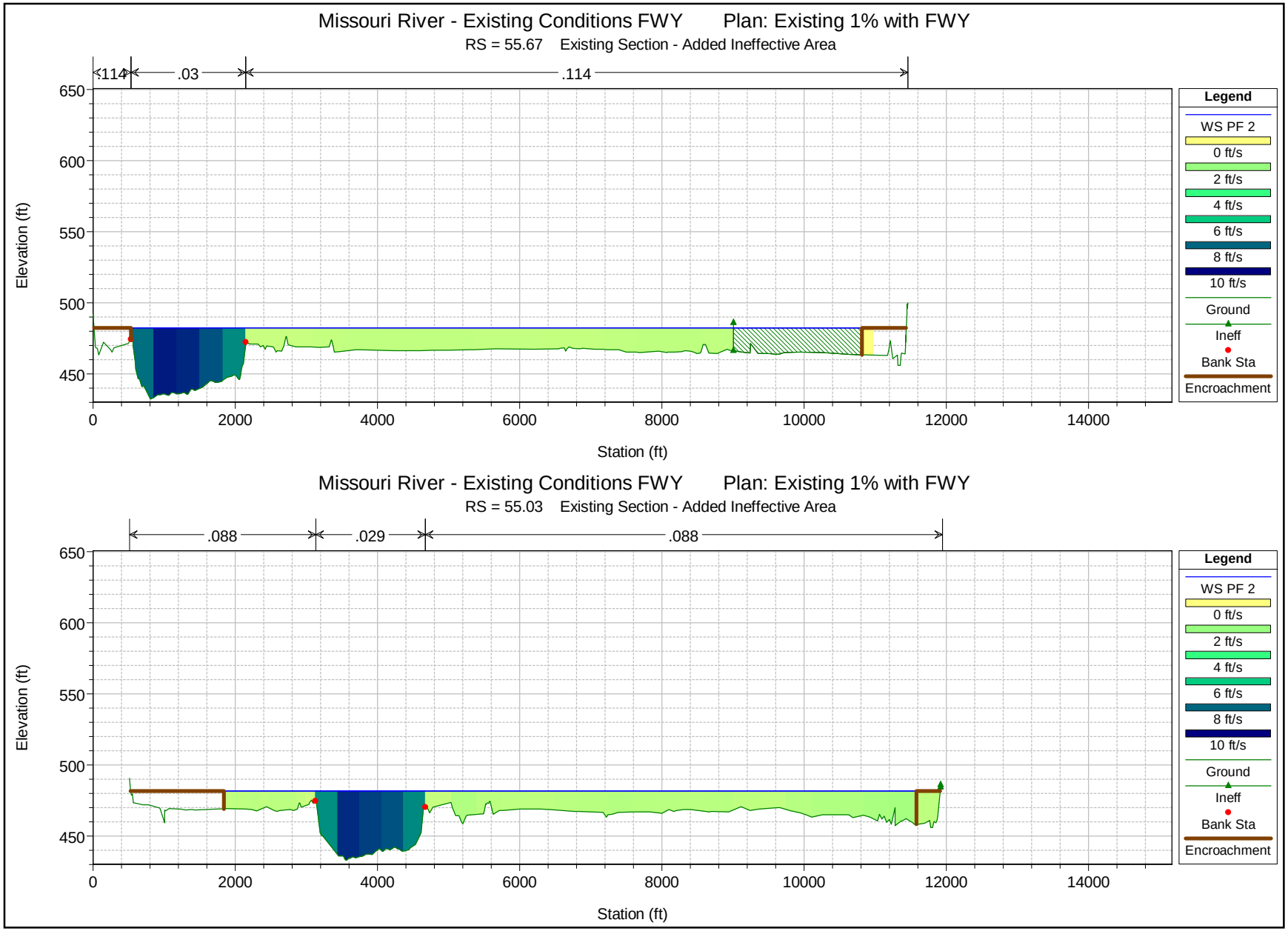
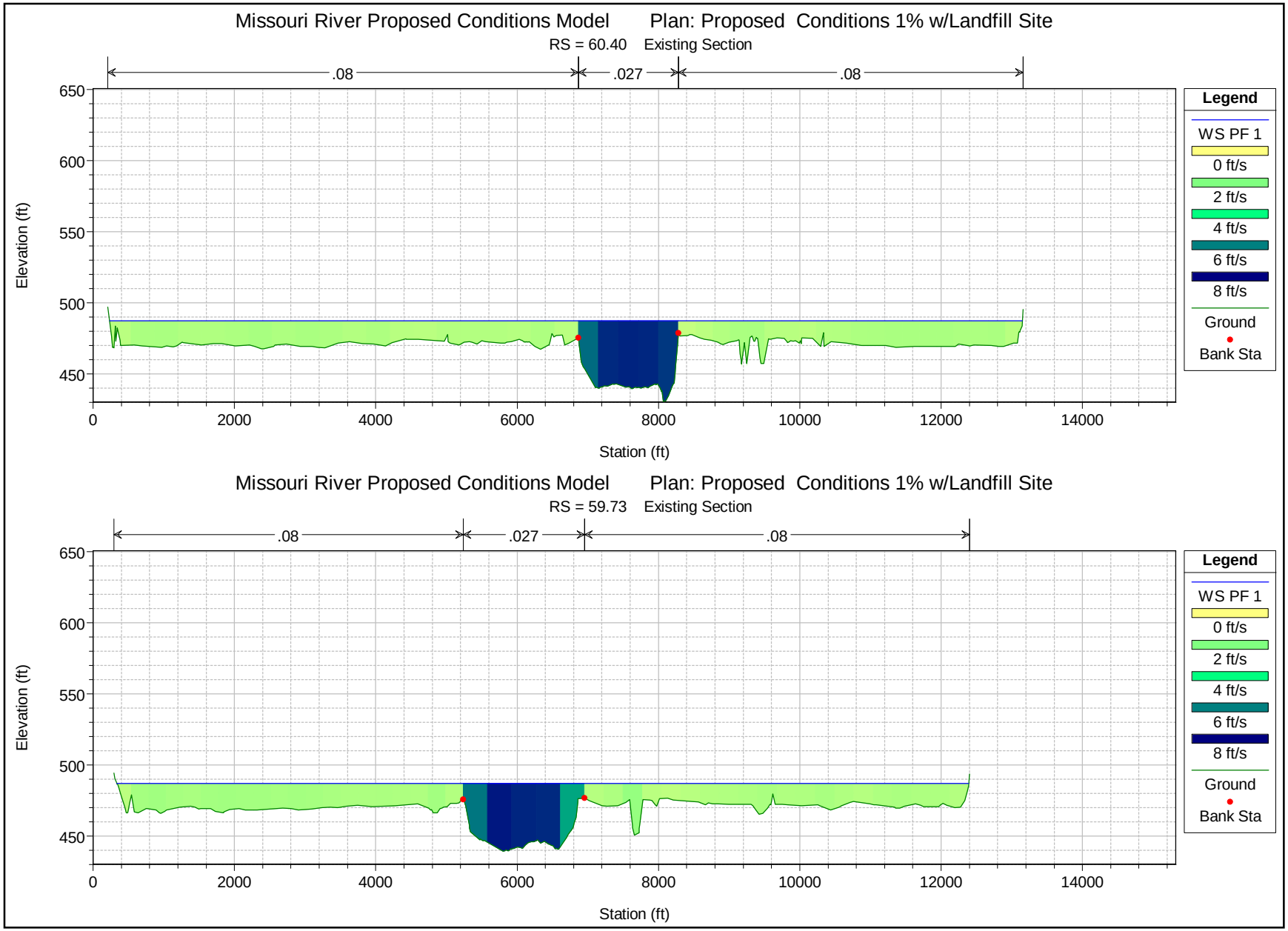


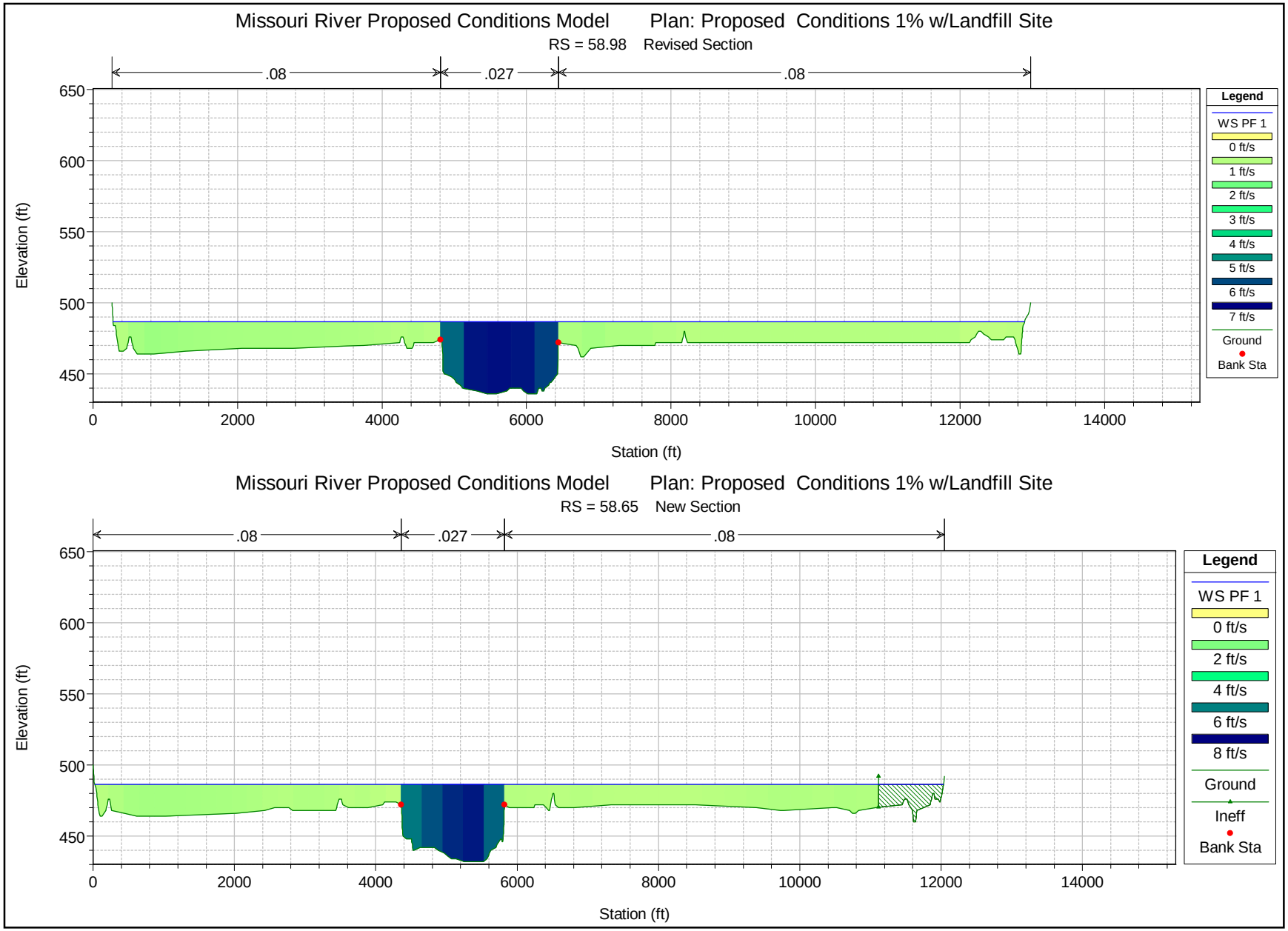
1 in Horiz. = 2000 ft 1 in Vert. = 100 ft

APPENDIX I

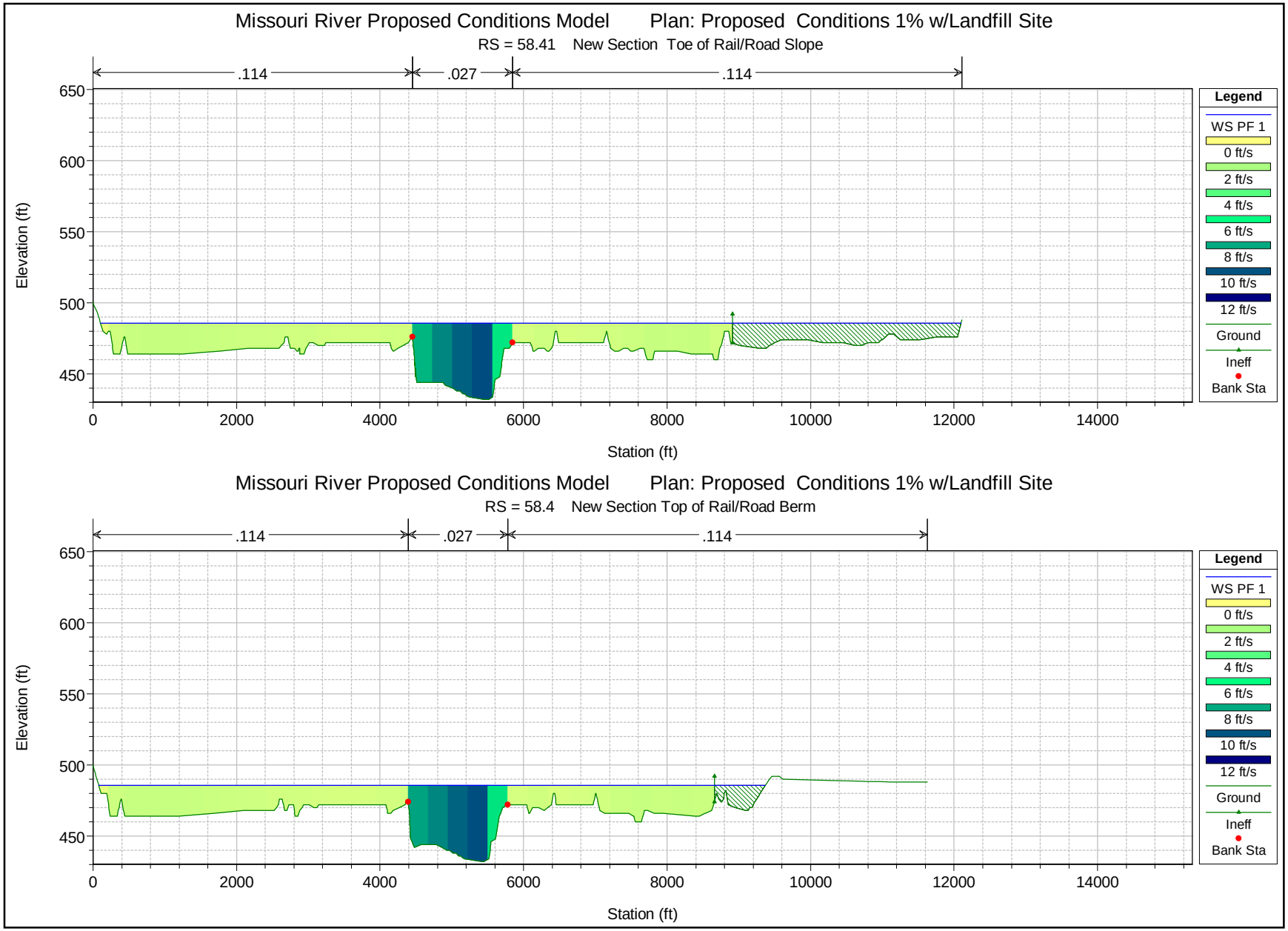
Velocity Sections
Proposed Conditions
Floodway Off
674,000 cfs



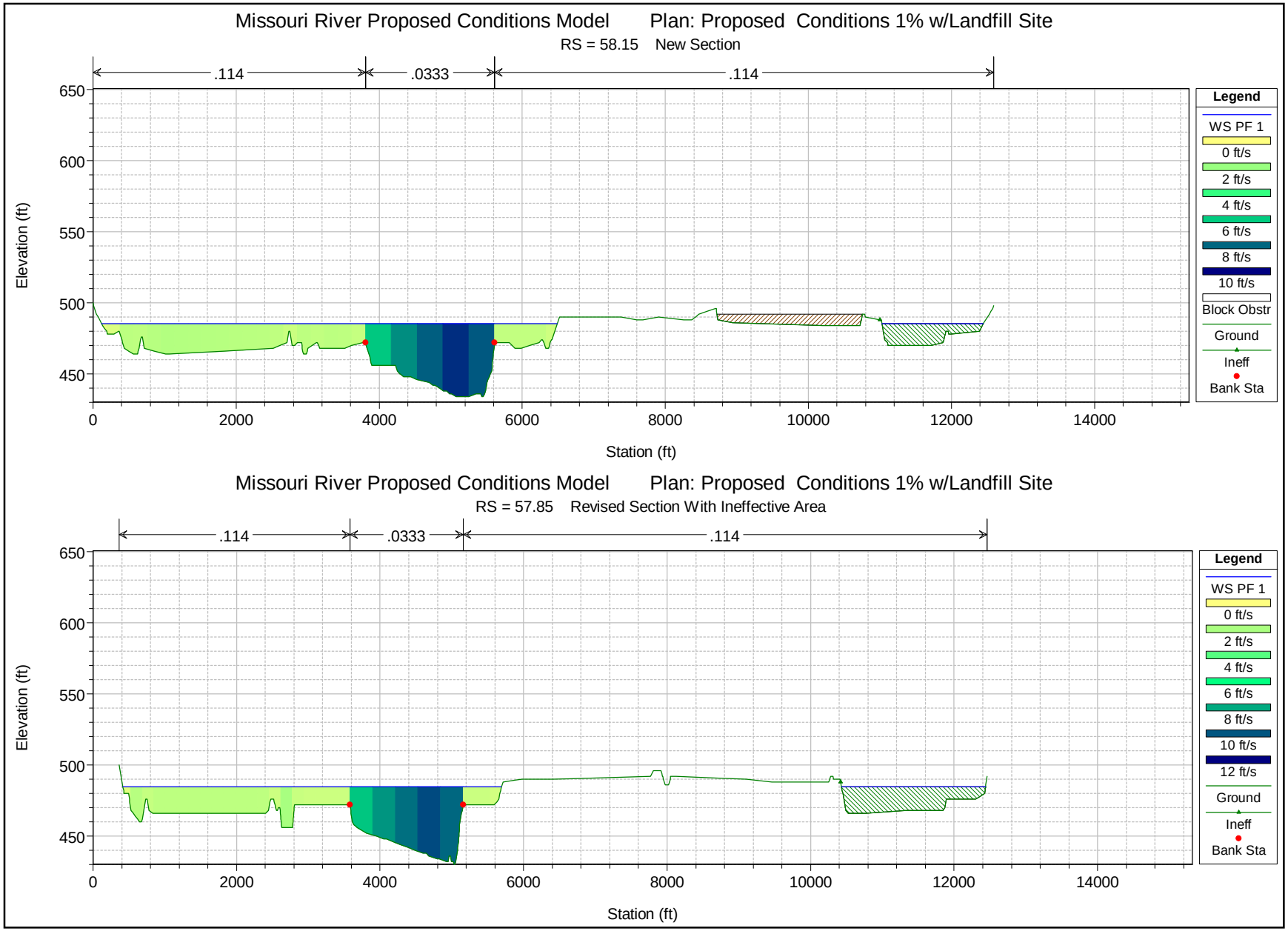
1 in Horiz. = 2000 ft 1 in Vert. = 100 ft



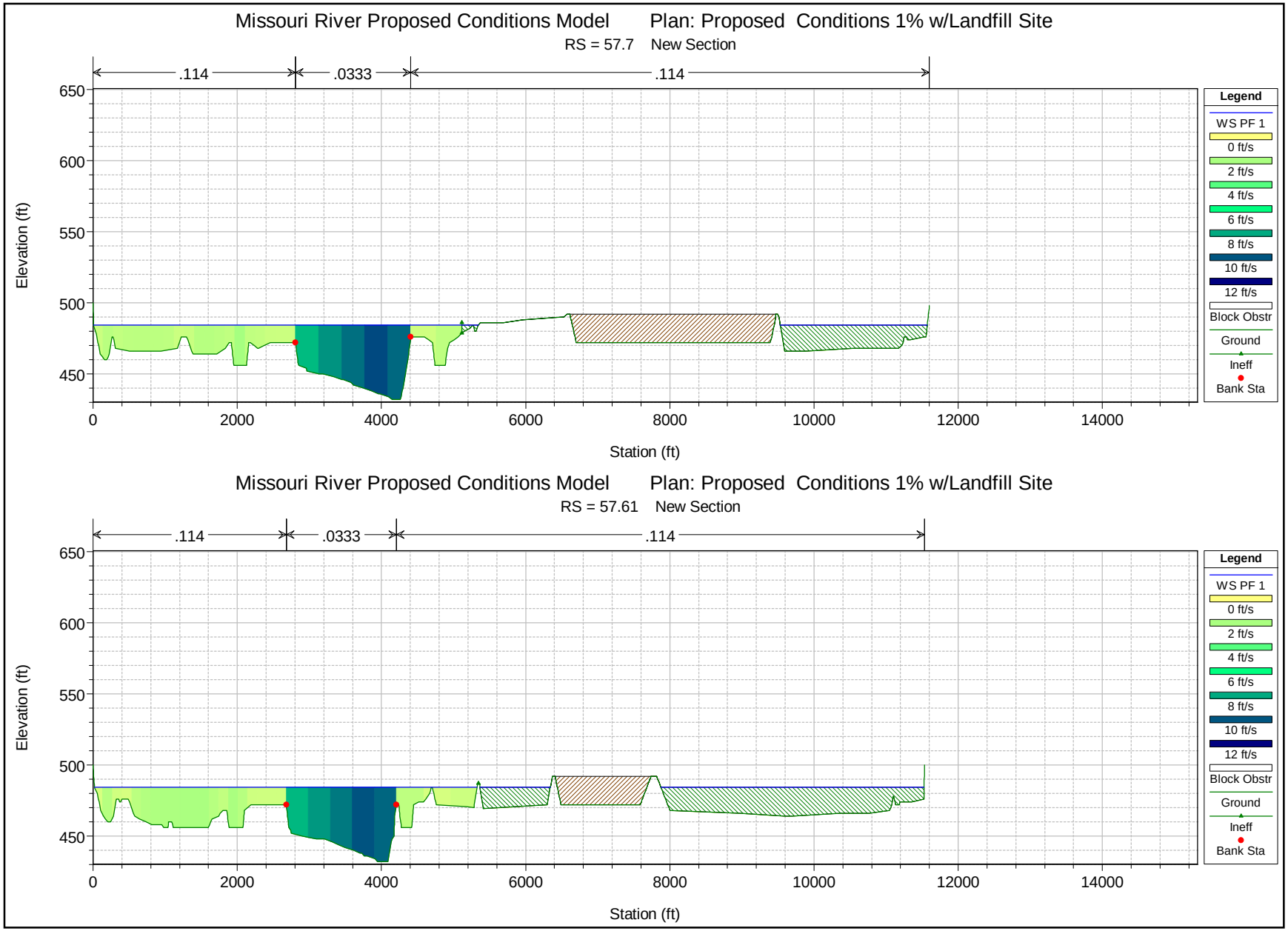
1 in Horiz. = 2000 ft 1 in Vert. = 100 ft



1 in Horiz. = 2000 ft 1 in Vert. = 100 ft



1 in Horiz. = 2000 ft 1 in Vert. = 100 ft



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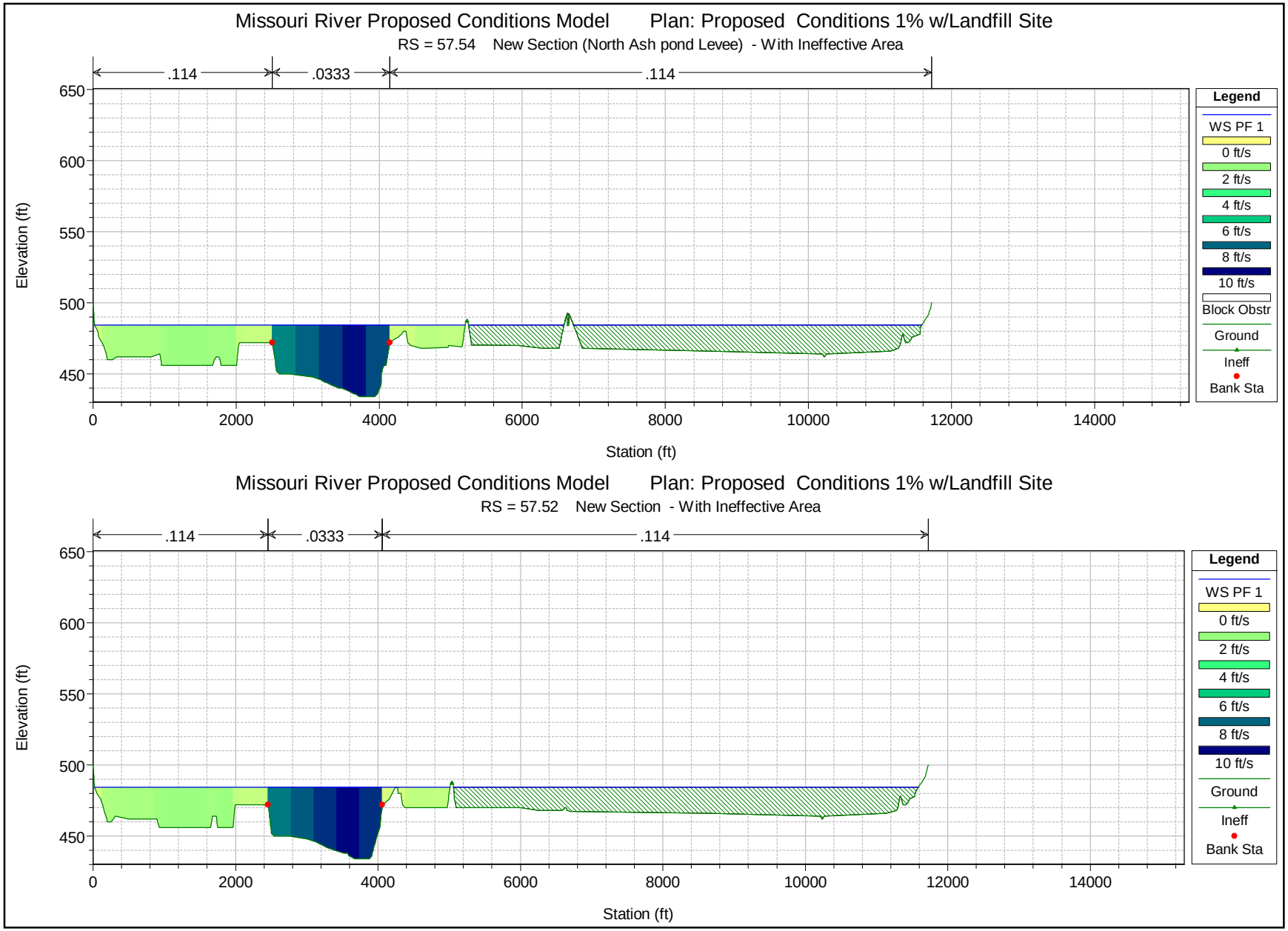

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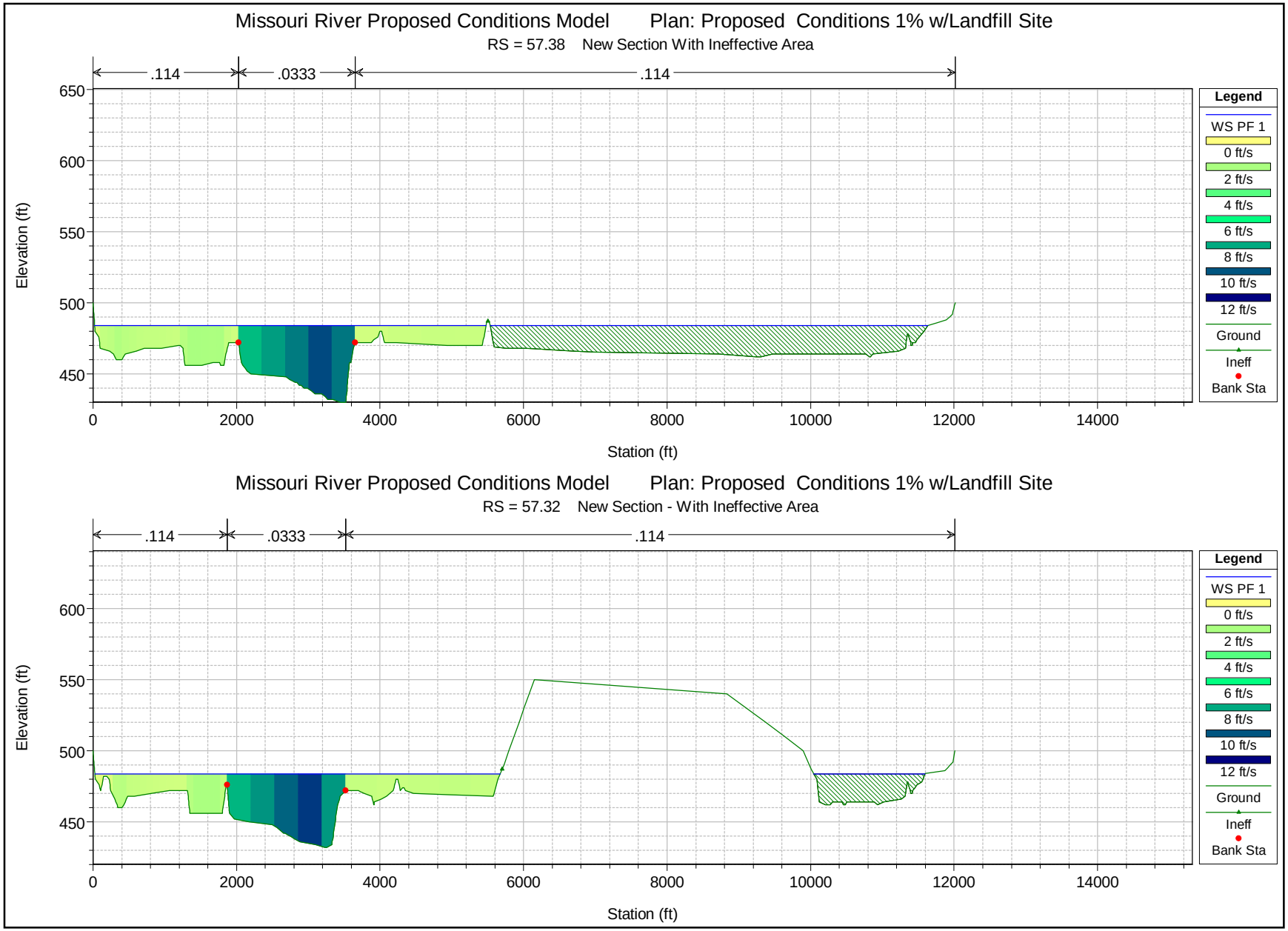
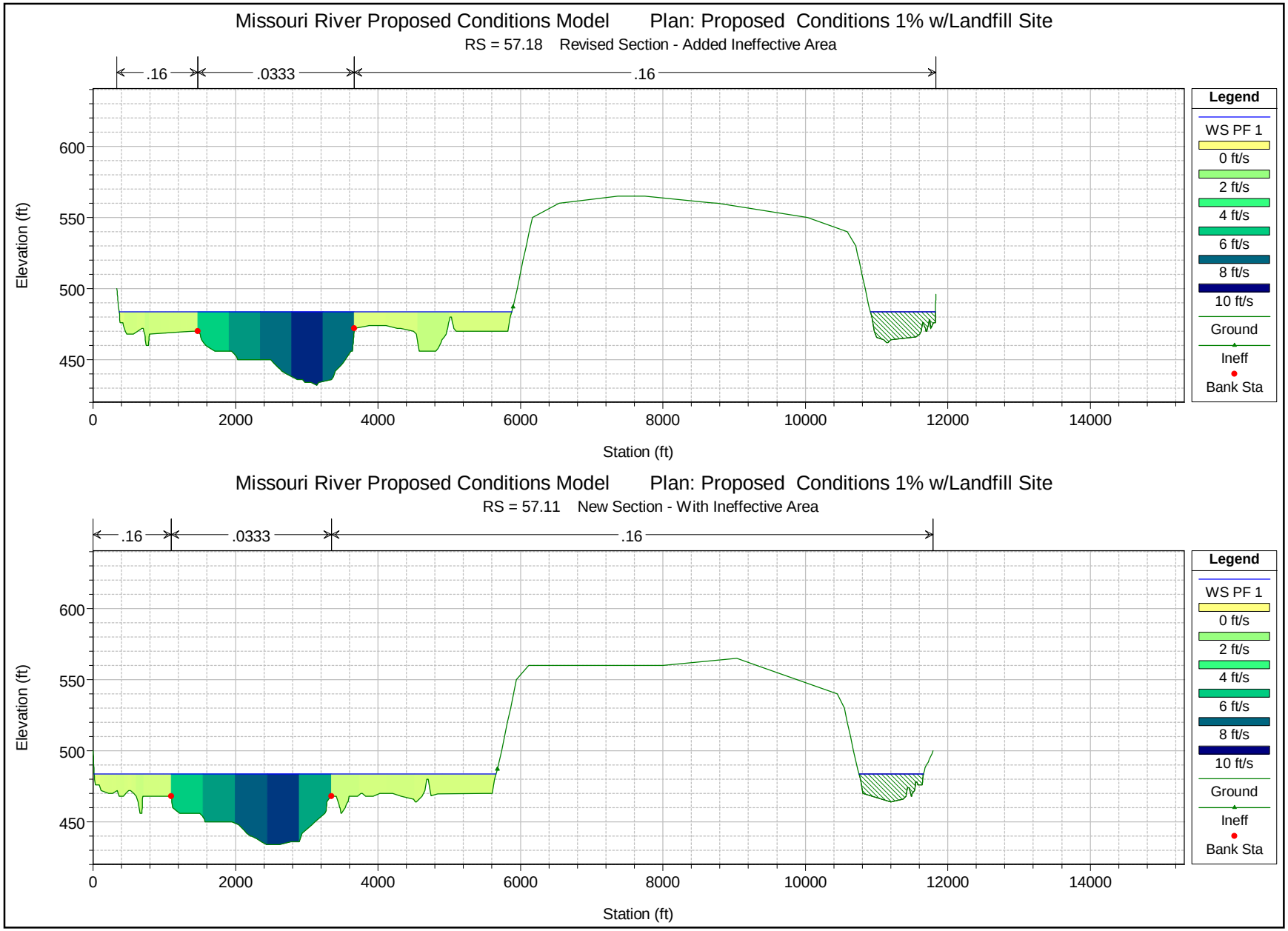
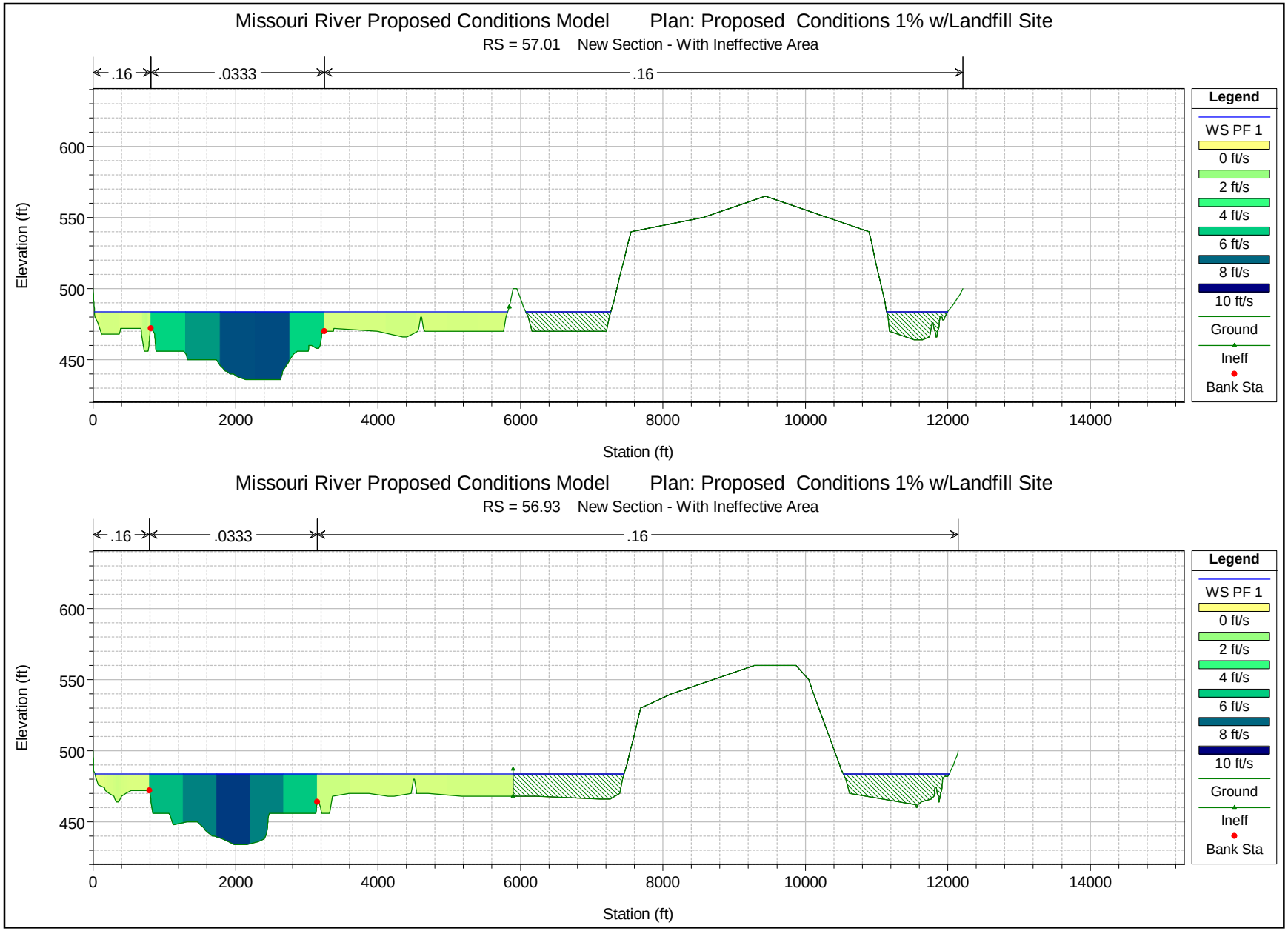


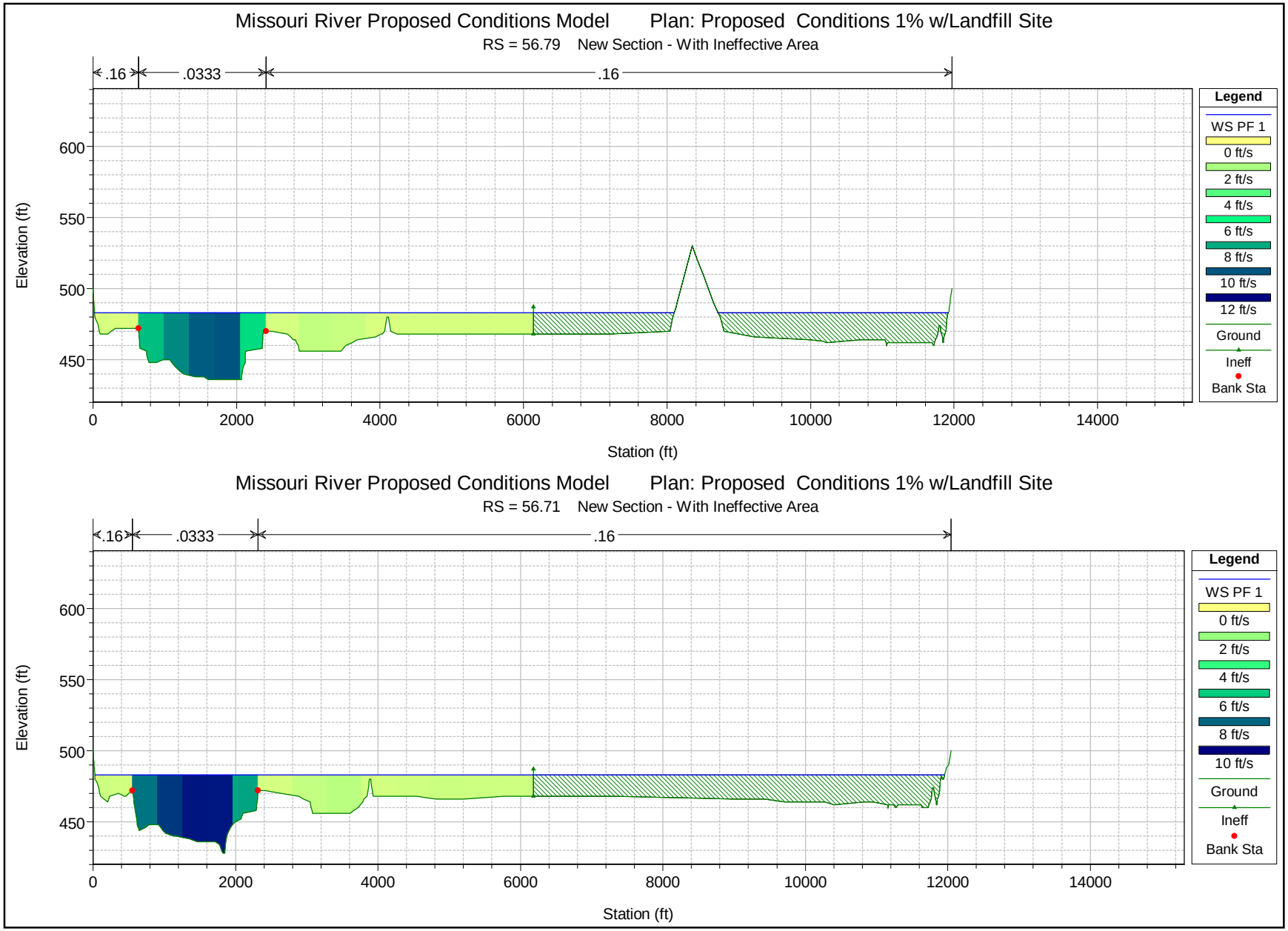
1 in Horiz. = 2000 ft 1 in Vert. = 100 ft



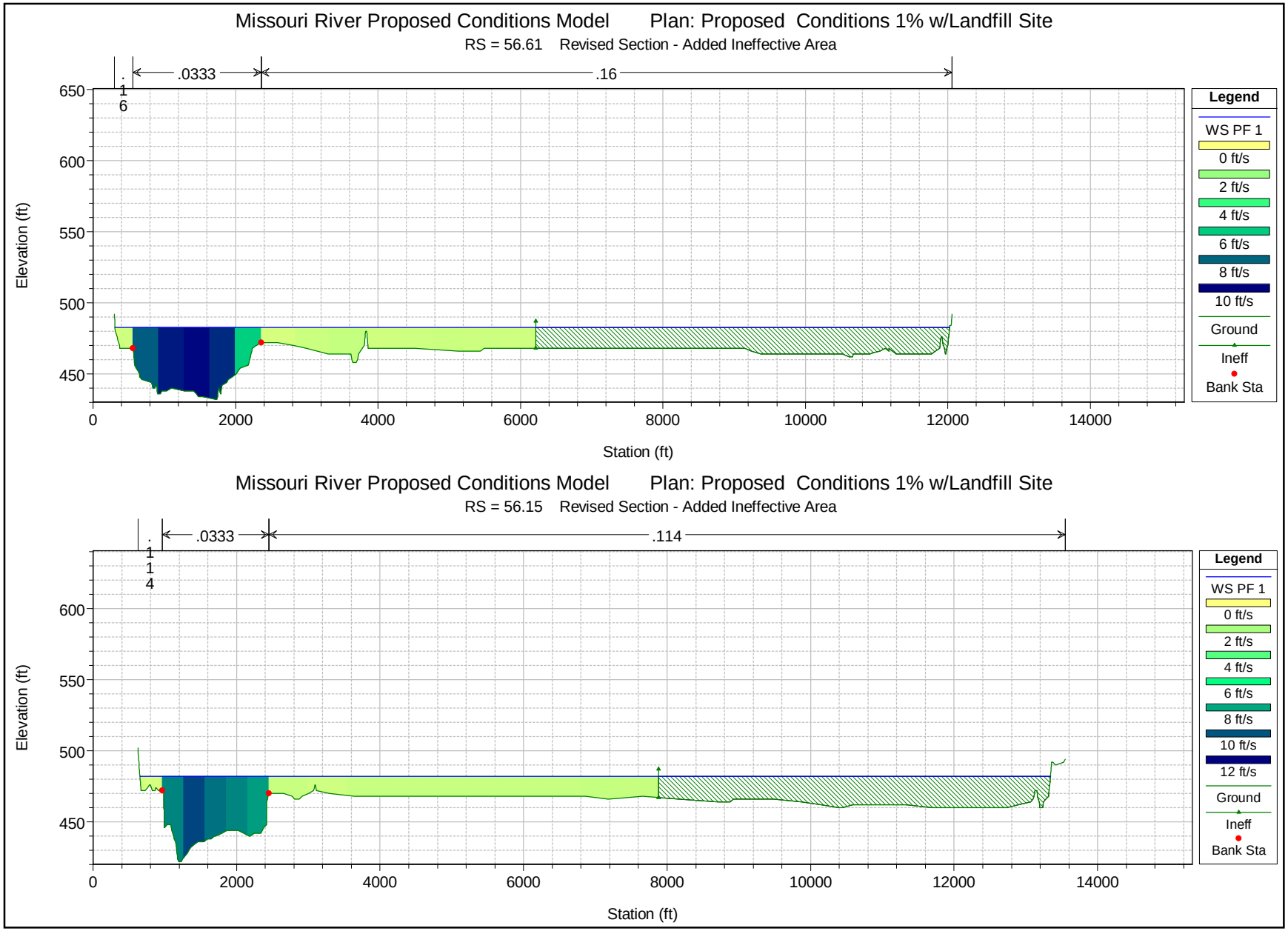
1 in Horiz. = 2000 ft 1 in Vert. = 100 ft



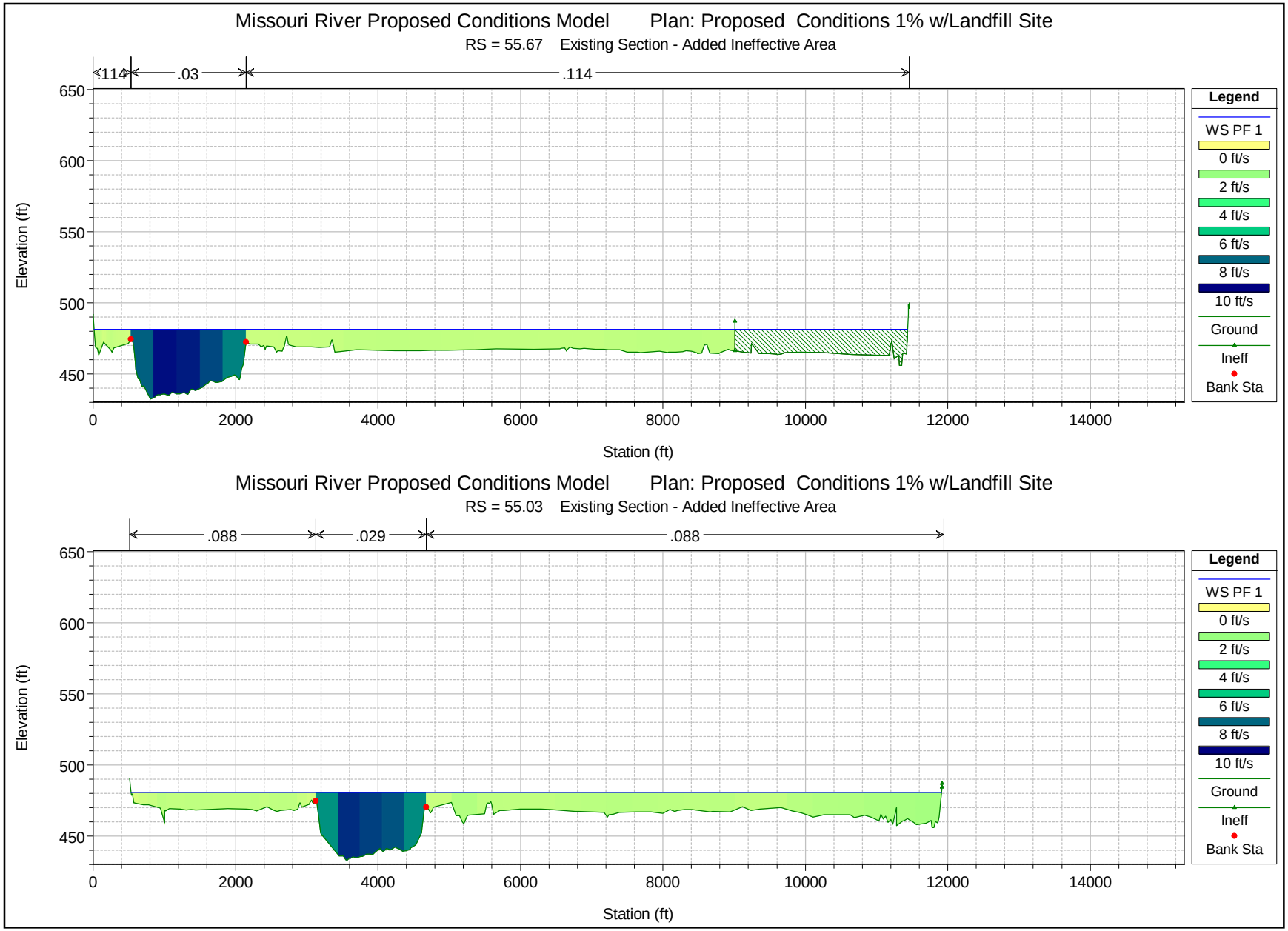
1 in Horiz. = 2000 ft 1 in Vert. = 100 ft



1 in Horiz. = 2000 ft 1 in Vert. = 100 ft



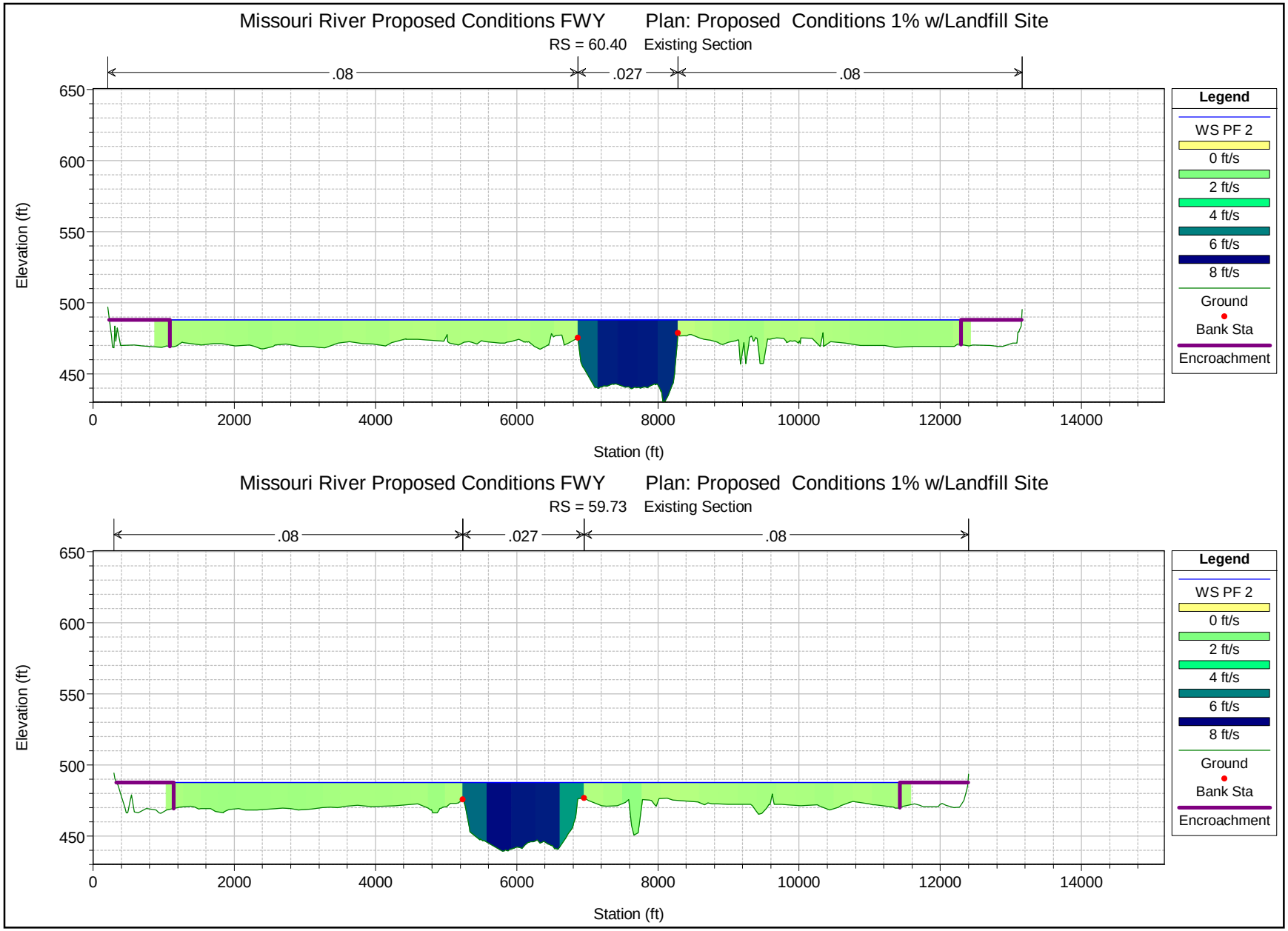
1 in Horiz. = 2000 ft 1 in Vert. = 100 ft



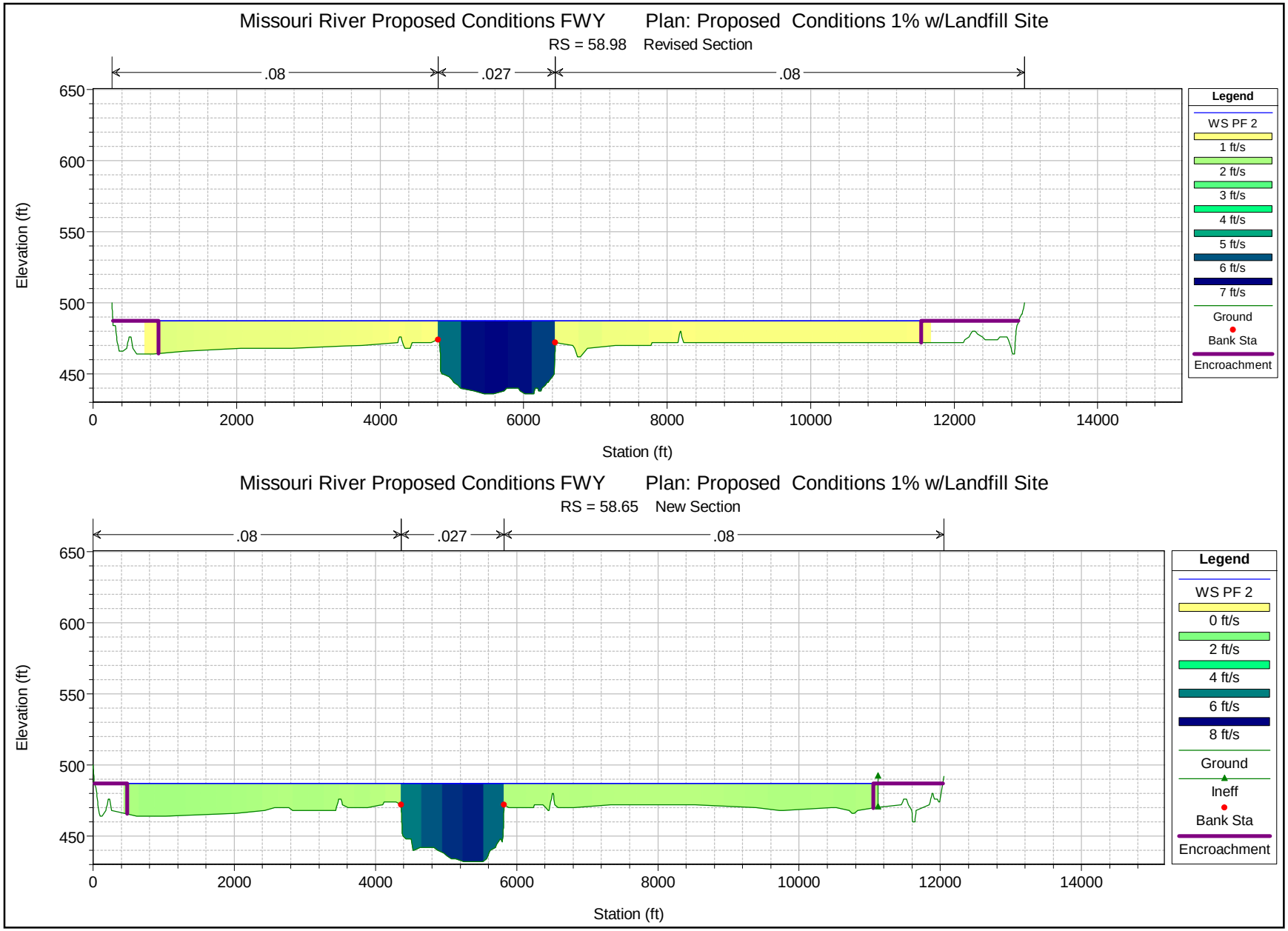
1 in Horiz. = 2000 ft 1 in Vert. = 100 ft

APPENDIX J

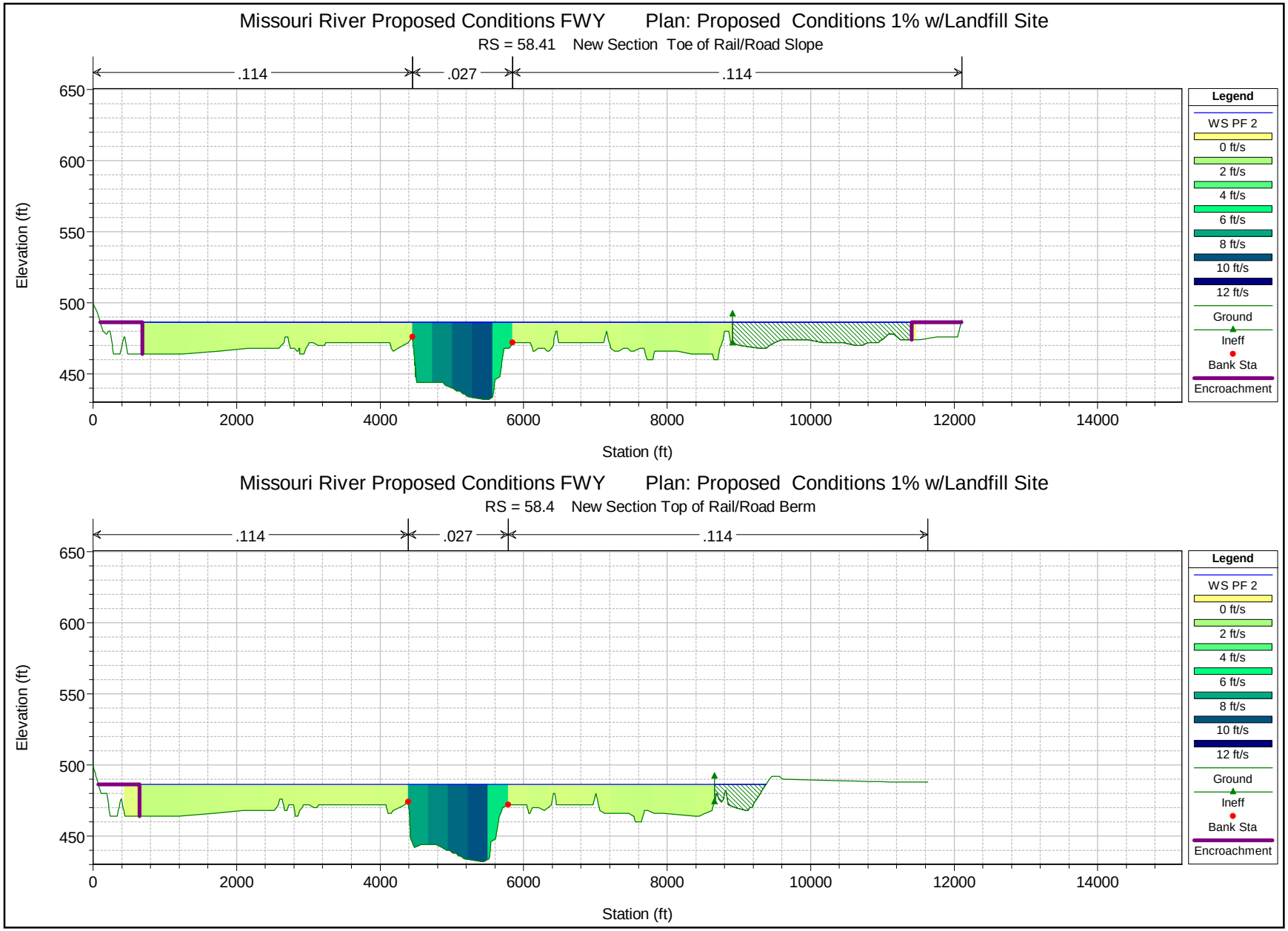
Velocity Sections
Proposed Conditions
Floodway On
674,000 cfs



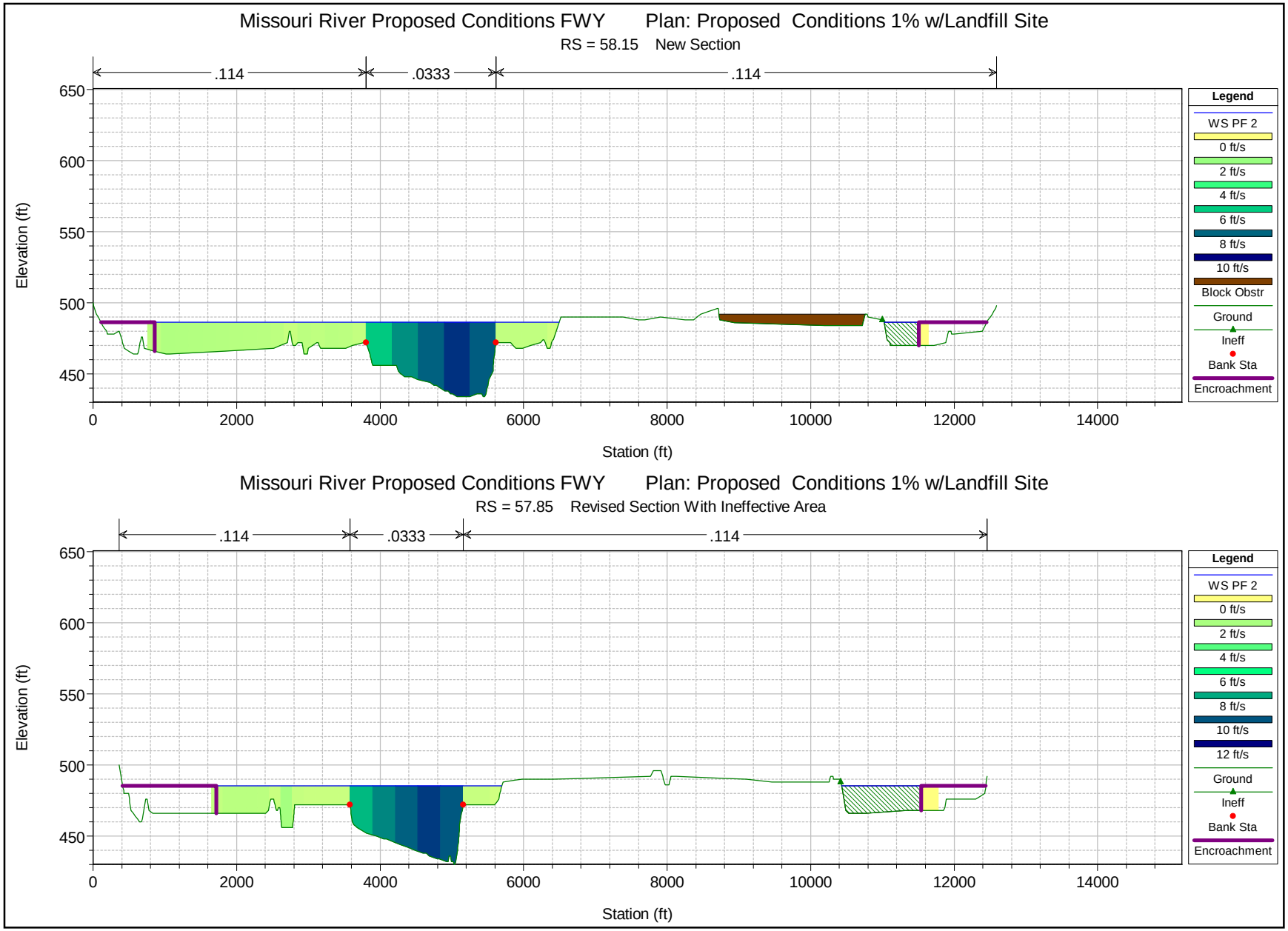
1 in Horiz. = 2000 ft 1 in Vert. = 100 ft



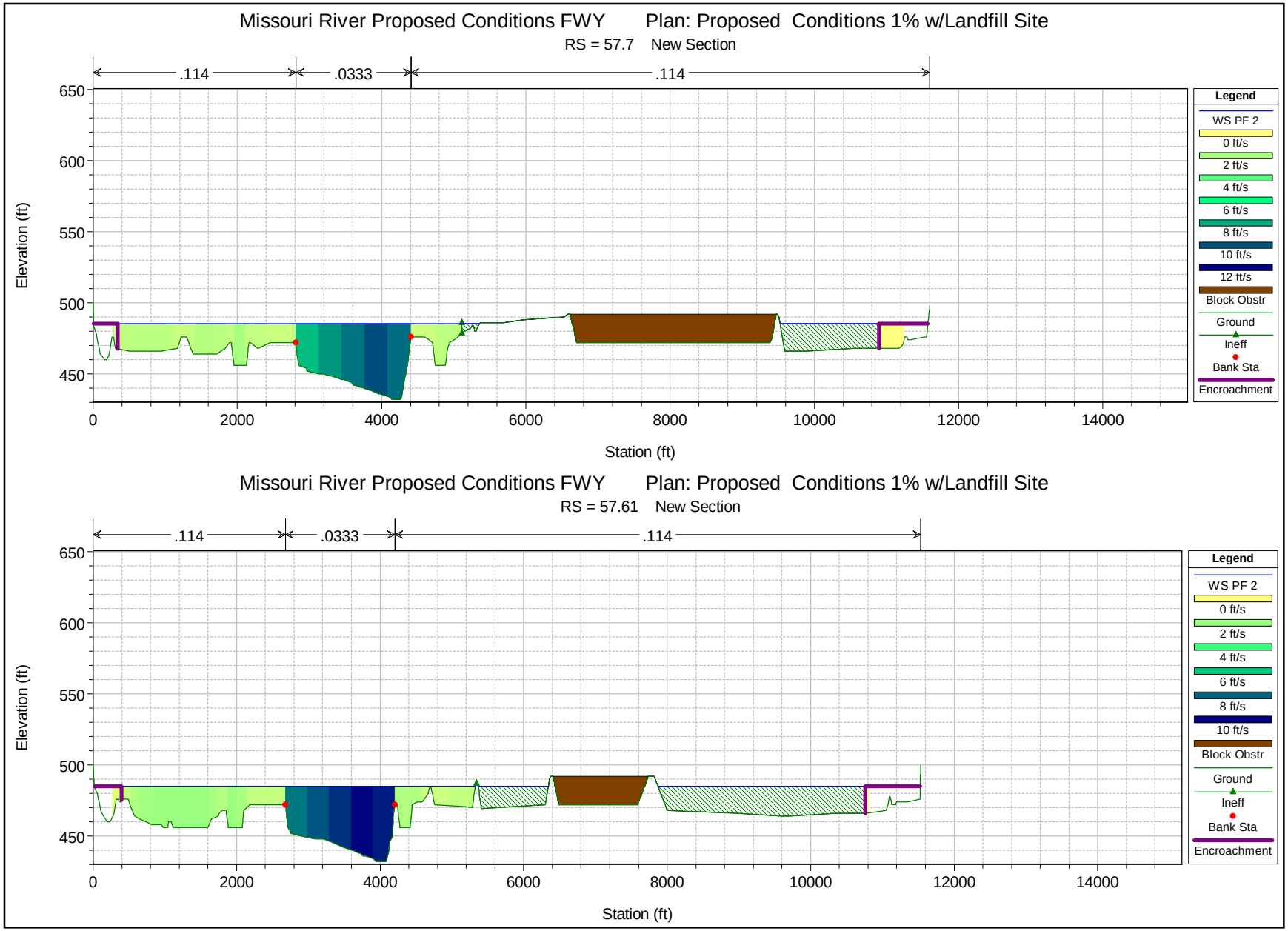
1 in Horiz. = 2000 ft 1 in Vert. = 100 ft



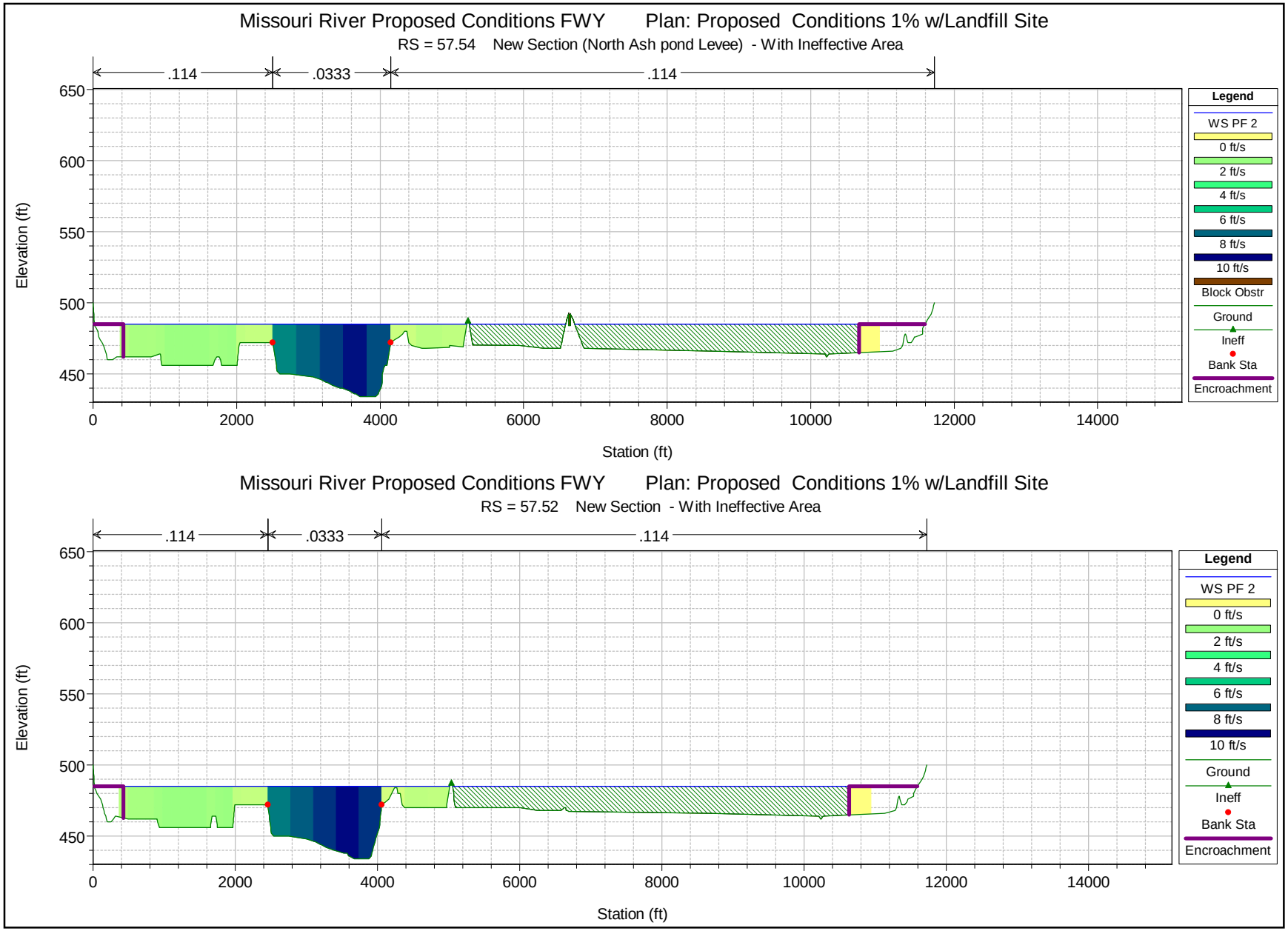
1 in Horiz. = 2000 ft 1 in Vert. = 100 ft



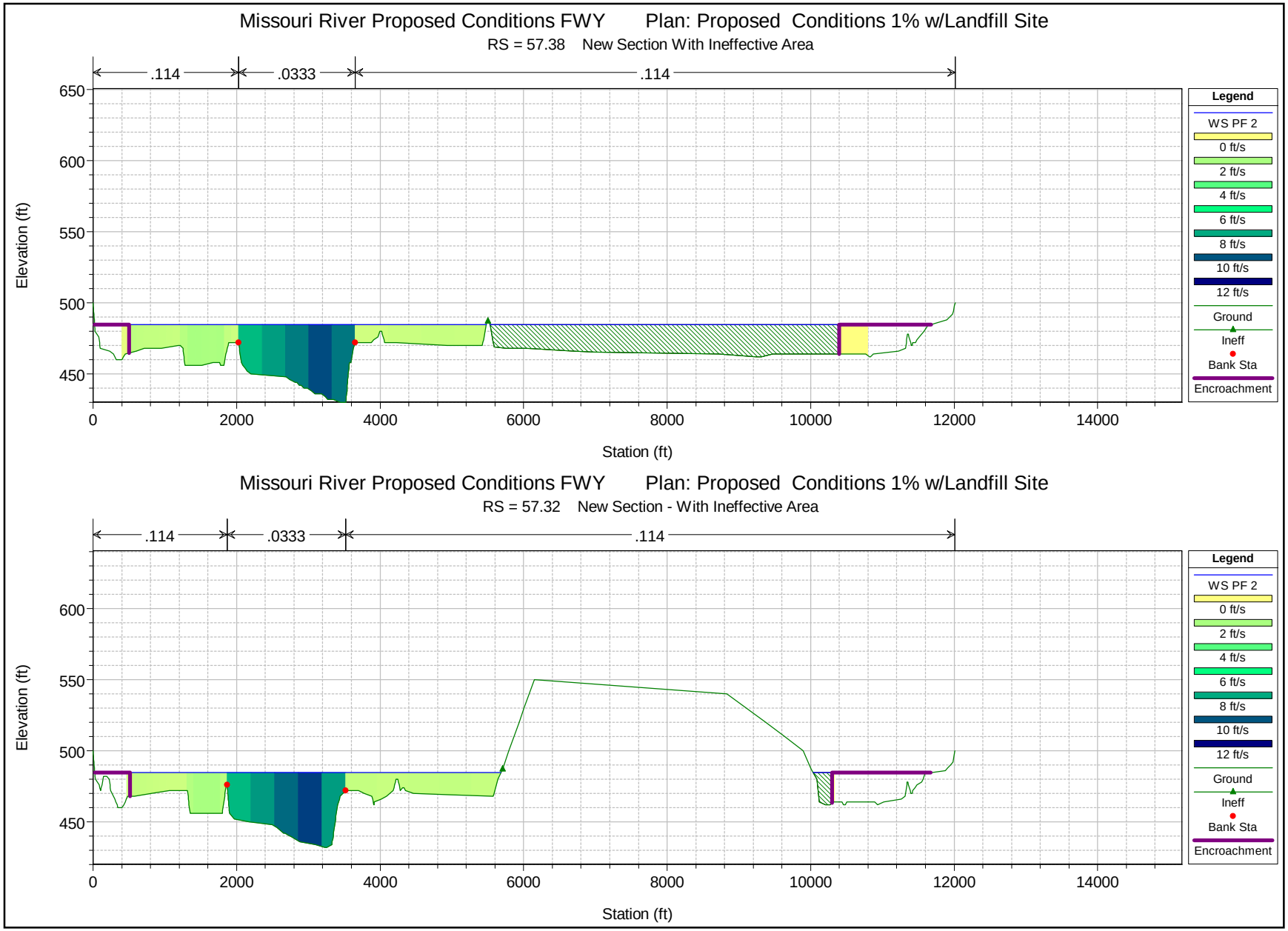
1 in Horiz. = 2000 ft 1 in Vert. = 100 ft



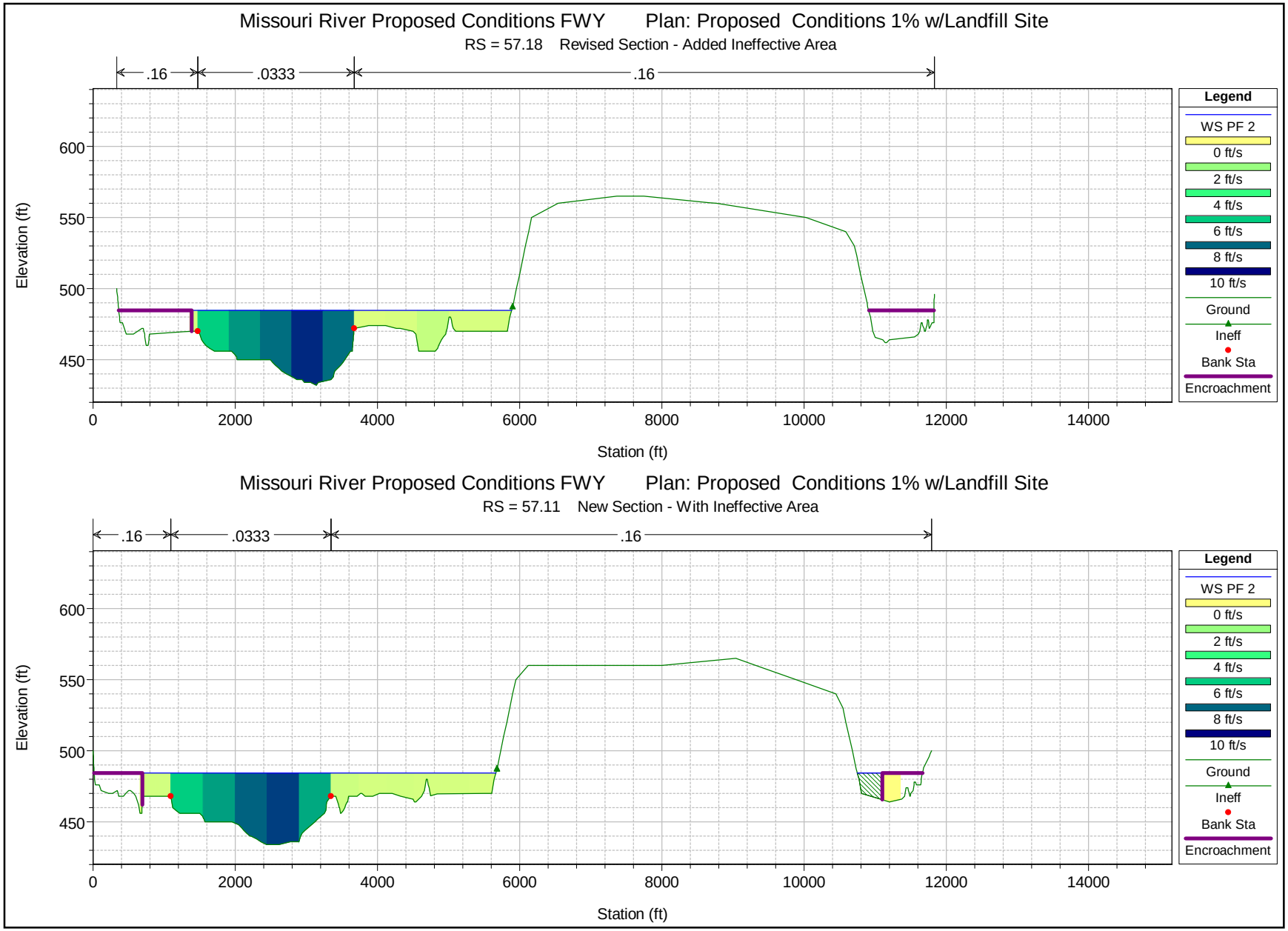
1 in Horiz. = 2000 ft 1 in Vert. = 100 ft



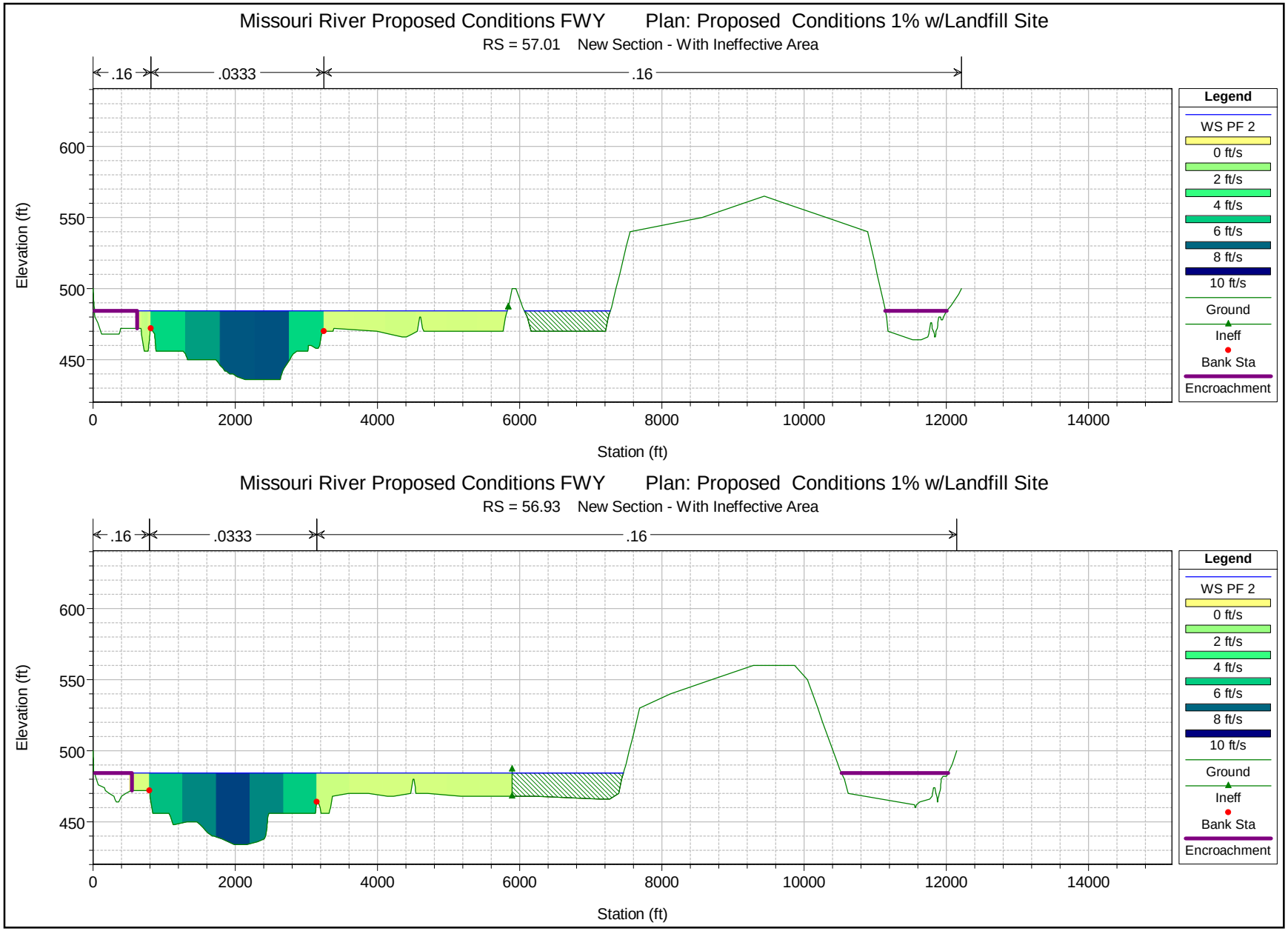
1 in Horiz. = 2000 ft 1 in Vert. = 100 ft



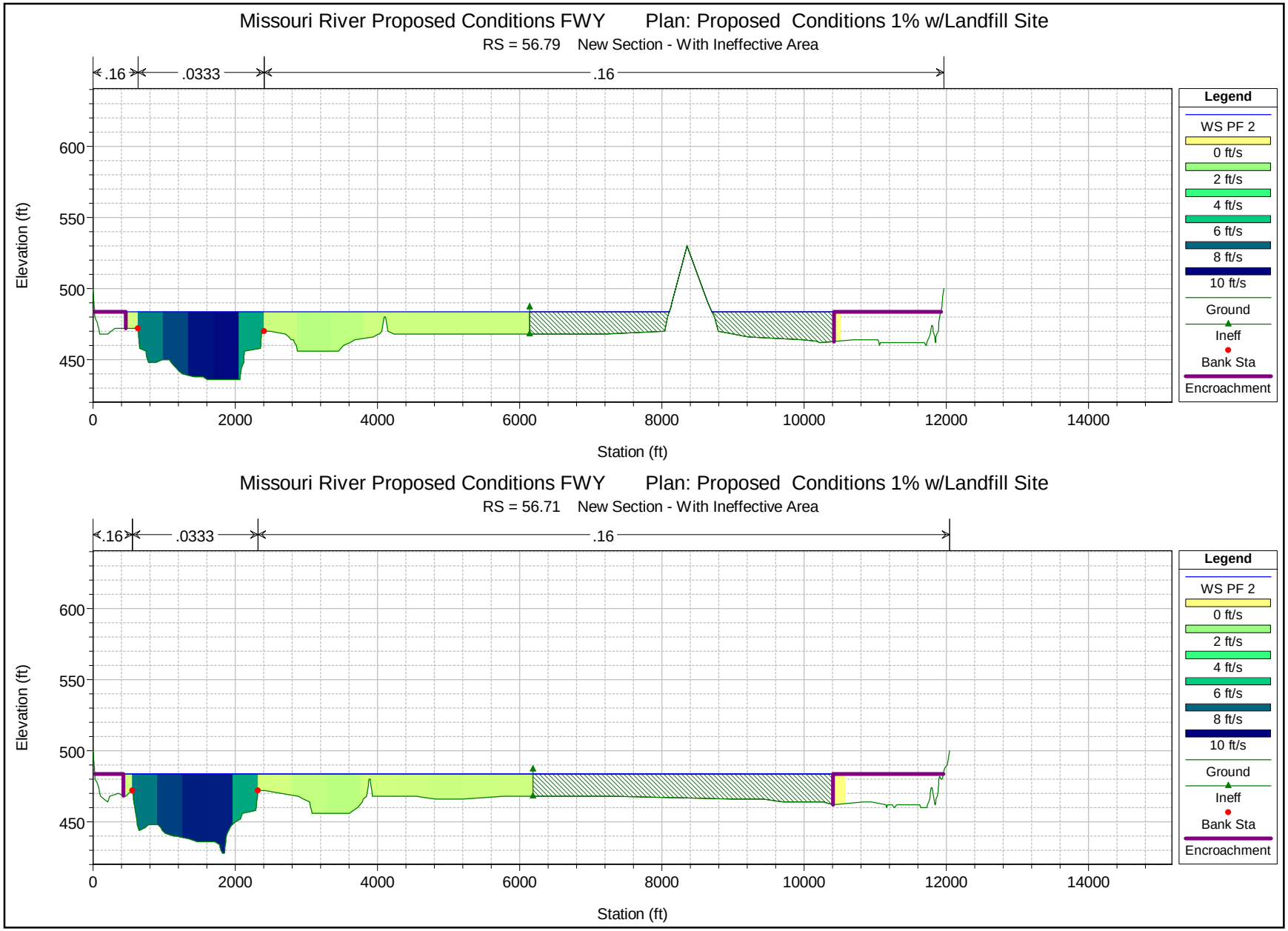
1 in Horiz. = 2000 ft 1 in Vert. = 100 ft



1 in Horiz. = 2000 ft 1 in Vert. = 100 ft



1 in Horiz. = 2000 ft 1 in Vert. = 100 ft



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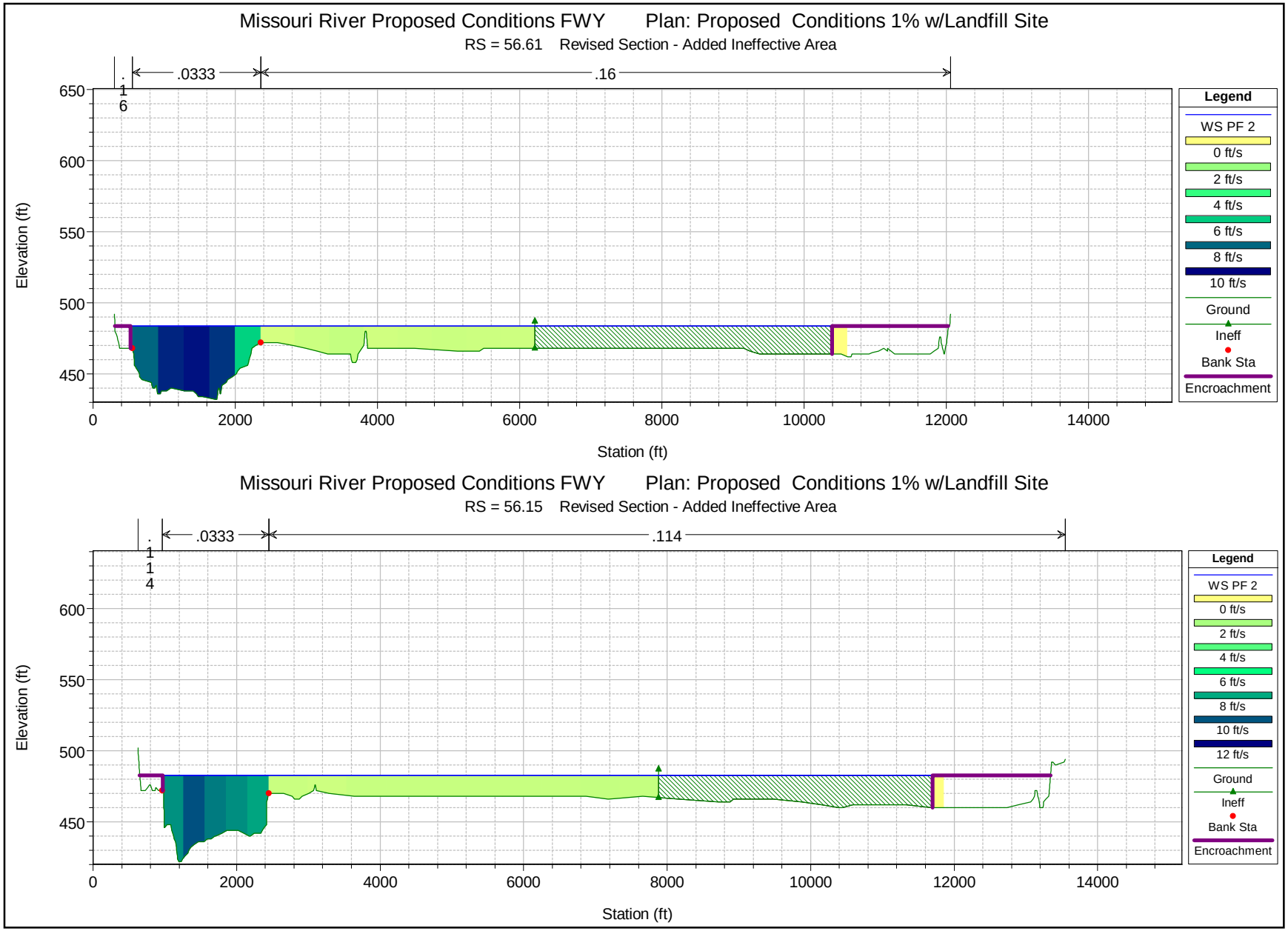

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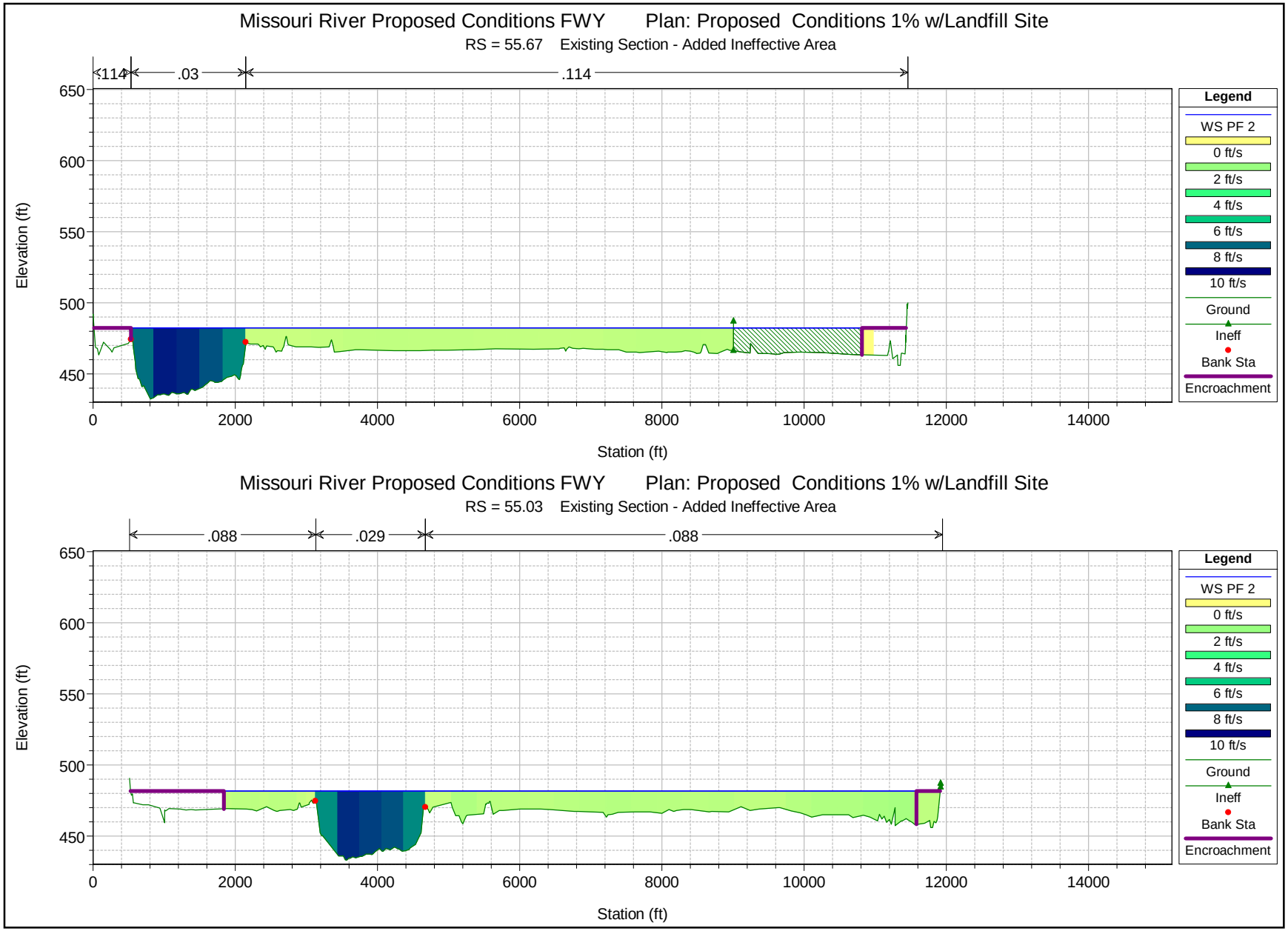

1 in Horiz. = 2000 ft 1 in Vert. = 100 ft

APPENDIX K

HEC-RAS Output 1st Page for
Currently Effective Model,
Duplicate Effective Model,
Existing Conditions Model, and
Proposed Conditions Model

HEC-RAS Version 4.1.0 Jan 2010
U.S. Army Corps of Engineers
Hydrologic Engineering Center
609 Second Street
Davis, California

```
X     X  XXXXXX    XXXX        XXXX       XX      XXXX
X     X  X        X    X      X   X     X  X    X
X     X  X        X           X   X    X    X   X
XXXXXXX  XXXX     X       XXX  XXXX     XXXXXX    XXXX
X     X  X        X           X  X     X    X        X
X     X  X        X    X      X   X    X    X        X
X     X  XXXXXX    XXXX       X    X   X    X   XXXXX
```

****

PROJECT DATA
Project Title: Missouri River Floodway RM 0 to 498- CEM
Project File : CEMODEL.prj
Run Date and Time: 8/12/2011 2:51:03 PM

Project in English units

Project Description:
Missouri River Floodway HEC-RAS model. CURRENTLY EFFECTIVE MODEL - CEMMORiver

(OFFICIAL 05-24-2011 from Greenhorne & O'Mara)
The reach from 1960 Missouri
River miles 0 to 498.1 was completed by the Kansas City District of the U.S. Army Corps of Engineers and represents a conversion and approximation of the original Upper Missouri River Flow Frequency Study (UMRFFS) modeling effort into HEC-RAS for the nominal 1% flow event. The modeling parameters in this model were adapted to approximate the conditions of the nominal 1% flow event only and have not been calibrated for any other flow events.

HEC-RAS
version 3.1.3 was used for this project. The vertical datum for the data included in this model is NGVD 1929. The horizontal datum for the data included in this model is UTM Zone 15 North.

****

PLAN DATA

Plan Title: UMRFFS 1%
Plan File : t:\working\11042 - Ameren Labadie flood Plain Analysis\D - Calculations and Design Data\Civil\Hydro\All HEC-RAS Models\CEMODEL.p01

Geometry Title: Missouri River Floodway RM 0 to 498
Geometry File : t:\working\11042 - Ameren Labadie flood Plain Analysis\D - Calculations and Design Data\Civil\Hydro\All HEC-RAS Models\CEMODEL.g01

Flow Title : UMRFFS 1-percent HEC-RAS approximation
Flow File : t:\working\11042 - Ameren Labadie flood Plain Analysis\D - Calculations and Design Data\Civil\Hydro\All HEC-RAS Models\CEMODEL.f01

Plan Summary Information:

HEC-RAS Version 4.1.0 Jan 2010
U.S. Army Corps of Engineers
Hydrologic Engineering Center
609 Second Street
Davis, California

```
X     X  XXXXXX    XXXX        XXXX       XX      XXXX
X     X  X        X    X      X   X     X  X    X
X     X  X        X           X   X    X    X   X
XXXXXXX  XXXX     X       XXX  XXXX     XXXXXX    XXXX
X     X  X        X           X  X     X    X        X
X     X  X        X    X      X   X    X    X        X
X     X  XXXXXX    XXXX       X    X   X    X   XXXXX
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****

PROJECT DATA
Project Title: Missouri River Duplicate Effective Model
Project File : DEMODEL.prj
Run Date and Time: 8/12/2011 10:00:32 AM

Project in English units

Project Description:
Missouri River HEC-RAS DUPLICATE EFFECTIVE MODEL (CDG,
Q=674,000cfs)

Missouri River NATURAL HEC-RAS model.

The reach from 1960
Missouri River miles 0 to 498.1 was completed by the Kansas City District of the U.S. Army Corps of Engineers and represents a conversion and approximation of the original Upper Missouri River Flow Frequency Study (UMRFFS) modeling effort into HEC-RAS for the nominal 1% flow event. The modeling parameters in this model were adapted to approximate the conditions of the nominal 1% flow event only and have not been calibrated for any other flow events.

HEC-RAS
version 3.1.3 was used for this project. The vertical datum for the data included in this model is NGVD 1929. The horizontal datum for the data included in this model is UTM Zone 15 North.

CDG 07-22-11

****

PLAN DATA

Plan Title: Duplicate Effective UMRFFS 1%
Plan File : t:\working\11042 - Ameren Labadie flood Plain Analysis\D - Calculations and Design Data\Civil\Hydro\All HEC-RAS Models\DEMODEL.p01

Geometry Title: Missouri River Floodway RM 0 to 498
Geometry File : t:\working\11042 - Ameren Labadie flood Plain Analysis\D - Calculations and Design Data\Civil\Hydro\All HEC-RAS Models\DEMODEL.g01

Flow Title : UMRFFS 1-percent HEC-RAS approximation
Flow File : t:\working\11042 - Ameren Labadie flood Plain

HEC-RAS Version 4.1.0 Jan 2010
U.S. Army Corps of Engineers
Hydrologic Engineering Center
609 Second Street
Davis, California

```
X     X  XXXXXX    XXXX        XXXX       XX      XXXX
X     X  X        X    X      X   X     X  X    X
X     X  X        X           X   X    X    X   X
XXXXXXX  XXXX     X       XXX  XXXX     XXXXXX    XXXX
X     X  X        X           X  X     X    X        X
X     X  X        X    X      X   X    X    X        X
X     X  XXXXXX    XXXX       X    X   X    X   XXXXX
```

****

PROJECT DATA
Project Title: Missouri River Existing Conditions
Project File : ECMODEL.prj
Run Date and Time: 8/19/2011 1:24:23 PM

Project in English units

Project Description:
MISSOURI RIVER, Existing Conditions Model (ECMODEL) Q=674,000cfs

Existing
Conditions Model of Most Current Conditions starting with Imported Model from
Greenhorne & O'Mara 05/24/2011 (Currently Effective Model)

HEC-RAS Model
with Q=674,000cfs, With Ineff Area Upsteam 1:1 Slope and 4:1 slope
Downstream

Missouri River HEC-RAS model.
The reach from 1960 Missouri
River miles 0 to 498.1 was completed by the Kansas City District of the U.S.
Army Corps of Engineers and represents a conversion and approximation of the
original Upper Missouri River Flow Frequency Study (UMRFFS) modeling effort
into HEC-RAS for the nominal 1% flow event. The modeling parameters in this
model were adapted to approximate the conditions of the nominal 1% flow event
only and have not been calibrated for any other flow events.

HEC-RAS
version 3.1.3 was used for this project. The vertical datum for the data
included in this model is NGVD 1929. The horizontal datum for the data
included in this model is UTM Zone 15 North.

 (Currently Effective Model
05-24-2011 from Greenhorne & O'Mara)

 CDG 07/22/2011

****

PLAN DATA

Plan Title: Existing Conditions w\Ineffective Areas
Plan File : t:\working\11042 - Ameren Labadie flood Plain Analysis\D -

HEC-RAS Version 4.1.0 Jan 2010
U.S. Army Corps of Engineers
Hydrologic Engineering Center
609 Second Street
Davis, California

```
X     X  XXXXXX    XXXX        XXXX       XX      XXXX
X     X  X        X    X      X   X     X  X    X
X     X  X        X           X   X    X    X   X
XXXXXXX  XXXX     X       XXX  XXXX     XXXXXX    XXXX
X     X  X        X           X  X     X    X        X
X     X  X        X    X      X   X    X    X        X
X     X  XXXXXX    XXXX       X    X   X    X   XXXXX
```

****

PROJECT DATA
Project Title: Missouri River Proposed Conditions Model
Project File : PCMODEL.prj
Run Date and Time: 8/19/2011 1:29:30 PM

Project in English units

Project Description:
MISSOURI RIVER, Proposed Model (PCMODEL) NO FLOODWAY

Proposed Model of
Proposed Landfill Conditions, base on the landfill Configuration and proposed new road to connect Power Plant with Landfill Site and Corrected Effective Model of Most Current Conditions.

HEC-RAS, Q=674,000cfs, with Ineffective
areas 4:1 slope downstream and 1:1 slope Upstream

Missouri River Floodway
HEC-RAS model.
The reach from 1960 Missouri River miles 0 to 498.1 was completed by the Kansas City District of the U.S. Army Corps of Engineers and represents a conversion and approximation of the original Upper Missouri River Flow Frequency Study (UMRFFS) modeling effort into HEC-RAS for the nominal 1% flow event. The modeling parameters in this model were adapted to approximate the conditions of the nominal 1% flow event only and have not been calibrated for any other flow events.

HEC-RAS version 3.1.3 was used for this project. The vertical datum for the data included in this model is NGVD 1929. The horizontal datum for the data included in this model is UTM Zone 15 North.

CDG 07/15/2011

(Currently Effective Model 05-24-2011 from Greenhorne & O'Mara)

CDG 07/22/2011

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PLAN DATA